# Lower Tay Canoe Trail

**Safety Scoping Study**

## Contents

1. Executive Summary
2. Introduction
3. Methodology
4. Health and Safety Issues
   1. Health and safety legislation
   2. User access
   3. Commercial river traffic
   4. Perth and Kinross Council Water Safety Policy
   5. River levels
   6. Mudflats and other hazards
   7. Rescue facilities
   8. Risk assessments for canoeing and kayaking
   9. Poisonous plants
   10. Resources
5. Opportunities
   1. What is a canoe trail?
   2. Other trails
   3. Current use
   4. Potential use / markets
   5. Commercial opportunities
   6. Conservation designations and invasive non-native species
      1. SSSI and Ramsar
      2. Natura designations — SPA and SAC
      3. Implications of the designations for the canoe trail
      4. Invasive non-native species
      5. Promotion of conservation messages
   7. Access and egress points
   8. Educational opportunities
   9. Infrastructure
   10. Promotional channels
   11. Coordination with other bodies
   12. Ongoing trail management
6. Recommendations
7. Bibliography
8. Appendices
   1. Appendix A — Risk assessment template
   2. Appendix B — Useful Contacts
   3. Appendix C — Canoe trail access and egress points
   4. Appendix D — Map of Tay Landscape Partnership area and Lower Tay Canoe Trail landings and places of interest

## Executive Summary

* The Tay Landscape Partnership is a four-year project celebrating the landscapes of where the Rivers Tay and Earn meet. The £2.6-milIion-pound initiative is principally funded by the Heritage Lottery Fund and will be accomplished through 29 individual projects. One of those 29 projects is the development of a Lower Tay Canoe Trail between Perth, Newburgh and Bridge of Earn.
* This study has considered the potential for a Lower Tay Canoe Trail and the report discusses aspects of its development, such as health and safety implications, environmental issues, marketing considerations, educational opportunities and infrastructure requirements.
* The research phase of this study comprised a series of stakeholder consultation meetings, site visits and a paddle trip on the Tay and Earn, plus a desk study to look into safety issues, market considerations and other canoe trails.
* Health and safety will be a vital area of consideration in the development of a canoe trail on the Tay and Earn, and the report discusses a series of issues that need to be addressed, such as legislation, commercial river traffic, river levels, rescue facilities, risk assessments and information and resources for communicating to users of the trail.
* The report highlights the work that has already been carried out in setting up canoe trails in Northern Ireland and suggests learning from the way in which their nine trails have been developed and promoted.
* The current use of the rivers by canoeists is assessed and the potential for increase in use discussed. A marketing approach has been adopted to segment the market into various types of use by paddlers and non-paddlers, as well as looking at the potential for commercial opportunities for guiding companies and providers of other local tourism services such as accommodation, transport and food and drink.
* The Tay estuary is an area of high conservation importance and has five nature conservation designations. The impact of the trail on these designated sites will be a major consideration in the development of the trail, and liaison with Scottish Natural Heritage will be a priority for the Tay Landscape Partnership.
* The canoe trail should become a hub for information about the trail, and communication channels such as a website and leaflet should promote a range of educational messages relating to health and safety, conservation and invasive non-native species, as well as interpretation about history, geology, landscape and wildlife, plus relevant information about tourism services.
* The report recommends the installation of a series of gauges to help paddlers make assessments of water levels, as well as the provision of washing facilities at the Willowgate Activity Centre and Newburgh. Other infrastructure projects, which are suggested as being worthy of consideration at some point in the future: are improved launching spots on the River Almond, under the bridge at Bridge of Earn and at Elcho Castle.
* Attention is drawn to addressing the future ongoing management of the canoe trail after the Tay Landscape Partnership project comes to an end in 2018.
* A comment that emerged from the stakeholder consultation is that Perth is a city with its back to the river. The canoe trail proposal is an opportunity for Perth to face the other way, to promote more activity on the river and enable people to enjoy the wonderful resource of the Rivers Tay and Earn.

**[IMAGE HERE]**

Smeaton's Bridge, Perth - as seen from a canoe.

## Introduction

This study has been commissioned by the Tay Landscape Partnership and carried out by Mike Dales of Big Pond Scotland, with support from Richard Caves of C Power Training.

Research work and the writing of this report took place between May and August, 2016.

The River Tay in Scotland is well known as a canoeing and kayaking destination, but this is mainly because of its attraction to white water paddlers who are drawn to the upper section of river around Aberfeldy and Grandtully, and further downstream around Stanley.

The idea of a Lower Tay Canoe Trail is to promote the lower section of the river as a canoe and kayak touring destination. Specifically, the River Tay between Perth and Newburgh, and the River Earn from Bridge of Earn to the confluence with the Tay near Newburgh.

The Tay Landscape Partnership is a four-year project aimed at celebrating the landscape of the area around where the Rivers Tay and Earn meet.

The Tay Landscape Partnership area stretches from Newburgh on the south side of the Tay Estuary, around Bridge of Earn to Perth and along the Carse of Gowrie towards Dundee. The project, a £2.6 million initiative principally funded by the Heritage Lottery Fund, will enable locals and visitors to reconnect with the natural, built and cultural heritage of the area. This will be accomplished through 29 individual projects.

The Lower Tay Canoe Trail is one of those 29 projects. The aim of the study has been to consider the potential for developing a Lower Tay Canoe Trail and to report on the following aspects of its possible development:

1. Health and Safety issues,
2. Environmental and conservation considerations;
3. Market segmentation;
4. Educational opportunities,
5. Information provision;
6. Logistical considerations,
7. Infrastructure requirements.

## Methodology

The research phase for this project has included the following elements:

1. In Stakeholder consultation;
2. Site visits,
3. Paddle trip along the trail;
4. Desk study;
5. Report production.

The stakeholder consultation phase has included interviews with the RSPB, SNH, Tay and Earn Trust, Scottish Canoe Association, Perth Canoe Club, Carse Canoe Club, Outdoor Explore, Perth and Kinross Council and local canoeists. The views and suggestions from all these organizations and individuals have been assimilated and included in this report.

Site visits have enabled the author to assess the range of launching, landing and parking sites with a view to making recommendations for which ones to promote and where upgrades to infrastructure might be required.

The paddle trip on the Tay and Earn enabled Mike and Richard, who are both familiar with the river from previous experience, to see the potential trail from the river and to assess the safety aspects of promoting use of the river, as well as spotting opportunities for improving the quality of the trail and identifying educational and other messages that could be promoted as part of the trail.

The desk-based aspect of the study included research into the safety issues that need to be considered in setting up the trail and highlighted in the promotional material for the trail. Another part of the desk-based study was in looking at other canoe trails from around the UK, particularly Northern Ireland, which now has nine canoe trails. These trails provide a valuable insight into how a Lower Tay Canoe Trail could be developed and promoted.

This report was written throughout July and August, and draws together the findings from the research phase of the study

## 4. Health and Safety Issues

### 4.1 Health and safety legislation

The basis of health and safety law is that as soon as a 'service' is provided the ‘service provider’ owes the 'service user' a duty of care. This duty of care cannot be satisfactorily discharged by use of a disclaimer alone.

Health and safety legislation is intrinsically very simple and should there ever be a case of negligence brought following an incident it is a shared tort/responsibility between the ‘user’ and the 'provider'.

The provision of a recognised canoe trail could be seen as a service in the fact that information, directions and so on are provided to a user, and the provider has a duty of care to ensure that the information is as accurate as is reasonably practical.

To discharge this duty of care, the provider would have to make it clear how old information is, and where more recent information regarding the trail may be found. To do this effectively it would be wise to distribute the information via a website rather than paper leaflets, however paper leaflets could play a part in providing a basic outline map detailing information that does not change significantly with time.

There are many potential hazards associated with the promotion of a canoe trail and the section below (4.2 to 4.10) highlights the major considerations that would need to be looked at in some detail if a trail was to be established.

### 4.2 User access

The provision of built structures, such as car parks and launching facilities for river access (e.g. pontoons) can be misused, sustain damage and become dangerous or just be the location of unforeseen accidents, thereby giving rise to the potential for someone sustaining an injury in an incident to claim damages from the facility provider and/or the promoter of the canoe trail.

### 4.3 Commercial river traffic

Perth is a commercial port with vessels of up to 96 metres in length and 3,000 tons arriving. Access is limited by the tide passing through a significantly narrow channel. MSN 1781 (M+F) The Merchant Shipping (Distress Signals and Prevention of Collisions) Regulations 1996 applies to all tidal and connected waters navigable by seagoing vessels, more commonly referred to as International Rules for the Prevention of Collisions at Sea (IRPCS).

Perth Harbour is run by Perth and Kinross Council and there is a full-time Harbourmaster, contact details in Resources (4.10) below. Perth Harbour Bylaws are in place, but are unlikely to have any significant relevance to the canoe trail. However, it is worth noting the contents of sections 47 and 48.

Sailing Vessels Boat Races, Regattas

47. (1) Sailing vessels under sail, boat races, regattas, public processions and other public events involving a number of vessels and/or craft are prohibited within the harbour area, except with the express, written permission of the harbour master following previous consultations.

(2) The organiser of any boat race, regatta, public procession or other public event, when a number of vessels are expected to assemble on the waters within port limits, of which the harbour area forms part, shall give/ give not less than 14 days notice thereof to the harbour master.

(3) Every boat race, regatta, procession or other public event shall be conducted on courses and at times previously approved by the harbour master.

Diving operations, Swimming and Bathing

48. No diving operation, swimming or bathing shall be carried out within the harbour area, except with the written consent of the harbour master.

### 4.4 Perth and Kinross Council Water Safety Policy

Perth and Kinross Council has a Water Safety Policy that will need to be taken account of when developing the canoe trail. Particular elements of that policy, such as (4.5) public education, (4.8) signage and (4.9) rescue equipment should be carefully considered. Canoe trail signage should incorporate safety messages and rescue equipment may need to be placed at promoted access and egress points.

### 4.5 River levels

The River Tay has a huge catchment area and during periods of heavy rain or snowmelt the river is often in spate and sometimes poses a significant flooding hazard to the area arounds its banks. It would be a wise caveat to make it very clear that the trail is not suitable for even the most experienced paddlers when the river is in spate. The **SEPA website** gives detailed warnings of flood risk and when the flood prevention scheme is active in Perth. The provision of tidal gauges would significantly help users make safer decisions as to whether the trail is safe to paddle.

It will also be important to note that the river level is to some extent artificially controlled by dams and hydro facilities further upstream. Water can be released from a dam at a time when water levels might be expected to be low, or conversely, dams can be closed to hold water back during periods of rain. This can lead to water levels not being as predictable as one might expect. The Tay River Levels website is a useful resource for gathering information on the level of the Tay and its tributaries, and should be promoted on the canoe trail website.

### 4.6 Mudflats and other hazards

A series of specific hazards that should be highlighted in any promotional material are:

* Mudflats,
* Sewage outlet,
* Weather conditions,
* Solo paddling.

The lower stretches of the canoe trail, from Cairnie Pier and the Earn confluence down to Newburgh, contain a series of mudflats that are potentially dangerous to anyone who fails to understand them and make accurate judgements to avoid getting caught in them. Paddling in the area between Cairnie Pier and Newburgh during a falling tide, especially towards the northern side of the estuary, is an activity that requires a great deal of knowledge and sound judgement. Information supplied in association with the canoe trail needs to be very clear in its warnings about these mudflats.

**The sewage outlet** on the inside of the bend in the river, to the east of the Willowgate Activity Centre, presents an unpleasant hazard on this stretch of river and should be highlighted on the trail website and leaflet. It would be wise to advise paddling along the middle of the river or over towards the north bank, but definitely to avoid rounding the bend close to the south side.

The River Tay becomes progressively wider and more exposed to the elements as the paddler on the canoe trail heads further downstream. The river around Cairnie Pier and the Earn confluence is around twice the width of the river at Friarton Bridge, despite the two places being only 5 miles, or 8 kilometres, apart. There are a reasonable proportion of days in the year when the wind is noticeably stronger at Cairnie Pier compared to the area around Friarton Bridge, and the interaction of wind and tide at Cairnie Pier can also be far more serious than at locations further upstream. Paddling in the lower reaches of the canoe trail area, especially from Inchyra down to Newburgh, are more demanding and require greater levels of ability, experience and judgement. Add in the situation where the wind is picking up and the tide starting to run faster, perhaps against the wind, and a paddler is presented with a serious piece of water to paddle on. There are many paddlers in Scotland that can cope with this scenario, and they are often out there and coping without any problems, but it will be necessary to explain this kind of situation in any promotional material in order to spell out the serious nature of this particular piece of water. One of the aims of such information should be to encourage those who are in any doubt to take a guided trip rather than risk getting into trouble on their own.

Whilst many people are sufficiently skilled and confident to paddle solo, the canoe trail information should warn of the dangers of paddling solo and also highlight the hazards involved in paddling with only one open canoe on the water. There have been at least two fatalities in Scotland in recent years where paddlers in an open canoe have capsized and been unable to perform a self-rescue.

### 4.7 Rescue facilities

There are no formal, dedicated, water-based rescue facilities in the Perth area. In the event of an incident on the lower Tay or Earn, rescue would come through the emergency services via the Fire Service (Swift Water Rescue) or from the Coastguard (Aberdeen) requesting a helicopter from Aberdeen or Prestwick, inshore lifeboat (ILB) support from the RNLI, or possibly Air Ambulance from the Scottish Charity Air Ambulance (SCAA) based at Scone airfield.

Once paddlers are downstream of Inchyra the river is surprisingly remote with few vehicular access points and there are no practicable vehicular access points on the Earn. Rescue from the shore would therefore be highly unlikely on long stretches of the canoe trail, so the most likely scenario is rescue from the water or air.

### 4.8 Risk assessments for canoeing and kayaking

All the following are primary hazards that should be addressed in a risk assessment for a canoeing or kayaking trip on a stretch of water like the lower Tay and Earn.

* Drowning — applicable to all water-based activities;
* Hypothermia — cold weather and water injury;
* Hyperthermia — heat injuries such as heat stroke, dehydration;
* Waterborne diseases — Weil's disease plus other gastro-intestinal infections borne in sewage outlets along the river;
* Sunburn;
* Slips, trips and falls — accessing the river and moving canoes and kayaks around,
* Lifting operations, back injuries — moving canoes and kayaks, especially on and off vehicles and trailers;
* Capsize and entrapment — from ill-fitting craft and submerged trees along riverbanks,
* White water — any white water can be avoided by choosing specific tidal states;
* Head injuries;
* Foot injuries — launch sites are often used by the general public for picnics etc. so hazards such as broken bottles and sharp metal should be expected.
* Commercial boat traffic — boats arrive into Perth Harbour on the flood and depart on the ebb;
* Tidal flow — this is always downstream on the Tay and Earn regardless of the state of the tide;
* Inability to contact emergency services — Use of marine VHF (Mayday CH 16 or DSC) is recommended along with personal locater beacons / PLB devices (ensure PLB devices are registered), mobile phone network coverage is good — worth considering registering you phone for the 999 text service <http://www.emeraencvsrns.org.uk/>.

A template generic risk assessment is included as an example in Appendix A, but is not intended as a final document, more a starting point for users to adapt to their own particular circumstances.

### 4.9 Poisonous plants

Giant hogweed is growing in alarming abundance along the banks of the Tay and Earn, particularly around Cairnie Pier. For that reason, it may be wise not to promote Cairnie Pier as a landing and picnic spot. It will, however, be sensible to provide as much information as possible on identifying giant hogweed and highlighting the importance of avoiding any form of contact with it. The plant represents a serious risk to human health, and the Lower Tay Canoe Trail might be the first time that some people actually see the plant.

The following paragraphs are taken from the Soilutions publication: "Everything you wanted to know about Giant Hogweed but were too afraid to ask".

"In Scotland the Scottish Minister, Scottish Natural Heritage (SNH), Scottish Environment Protection Agency (SEPA) and Forestry Commission Scotland (FCS) have powers to require land managers to take action in relation to invasive species. In practice this means that SNH who have responsibility for land based invasive species can put in place Species Control Orders or Emergency Control Orders to force a landowner to take action to prevent the spread of Giant Hogweed.

If the plant is obstructing a public footpath or otherwise can be deemed to be presenting a risk to human health local councils also have powers to compel landowners to take action to avoid causing harm. Section 79 of the Environmental Protection Act 1990, allows for enforcement action to be taken where the giant hogweed is, or is likely to be, prejudicial to health."

A project to eradicate giant hogweed from along the banks of the Tay and Earn is beyond the scope of the Tay Landscape Partnership, but this is a potential future project that the various interested parties in the area might wish to consider at some point.

Other plants only really cause a problem if ingested, which is unlikely in this scenario. Hemlock and foxgloves are examples of such plants.

### 4.10 Resources

* Open sea map
* Perth tide times from tidetimes.org.uk
* Perth tide times from tidetimes.co.uk
* BBC tide times for Scotland
* Perth harbour
* Invest in Perth - Perth harbour
* Navionics webapp
* Tay River Levels
* BBC weather
* Met Office weather forecast
* AccuWeather forecast
* MetCheck weather forecast
* Nick Horner, Perth Harbourmaster: [NCHorner@pkc.gov.uk](mailto:NCHorner@pkc.gov.uk) Tel: 01738 624 056
* Admiralty Chart BAI 479 River Tay Dundee to Perth
* Ordnance Survey Landranger Series 1:50,000 - Sheet 58
* Ordnance Survey Explorer Series 1:25,000 - Sheets 369 and 370

## 5. Opportunities

### 5.1 What is a canoe trail?

In considering the potential for a new canoe trail along a given stretch of water it is worth taking time to consider what a canoe trail is. Canoe trails are being developed throughout the United Kingdom and it would be fair to say that most of the work involved in setting up new trails is in the production of information and development of waterside facilities and infrastructure.

The trail surface, the actual water, does not require the same level of maintenance and management as the path surface on a terrestrial long distance route. The water in the form of a river, loch, canal or sea is already there, but the information that people require before taking to the water can be hidden away in a range of different locations. Canoe trails bring that information together into one place so that everything required for planning a trip or finding a guide can be gleaned from a website or leaflet.

Whilst the water is already there, the facilities for parking, launching, stopping for a rest and leaving the water at the end of a trip might require some development, so the development of canoe trails usually involves a degree of identifying the need for new infrastructure, then putting those facilities in place.

So, in answer to the question, "What is a canoe trail?", the answer lies in the gathering of information and development of infrastructure, both of which make it easier and more enjoyable for people to get out onto the water to gain the healthy benefits of open air recreation.

### 5.2 Other trails

Over the last ten years there has been a proliferation of canoe trails across the whole of the UK. Northern Ireland has pioneered the concept of the canoe trail and now has nine trails throughout the region. The **Canoe Northern Ireland website** has details of these trails, and this is certainly a good place for gathering information on how canoe trail information is being promoted successfully by the canoeing, sporting and tourism bodies in Northern Ireland.

Around 90 canoe trails have been developed in England and Wales, and information on these can be found on the **British Canoeing website**. Most of these trails are based on a set journey along a short, sheltered, stretch of canal or river, and the level of information tends to be less detailed than for the Northern Irish trails.

Scotland has also embraced the canoe trail concept and now has four trails. The undoubted market leader is **the Great Glen Canoe Trail** from Fort William to Inverness, which follows the line of the Caledonian Canal and Lochs Lochy, Oich and Ness. This has been developed by Scottish Canals, which has also set up the **Glasgow to Edinburgh Canoe Trail** along the Forth and Clyde Canal from Glasgow to Falkirk and then the Union Canal to Edinburgh. **The Argyll Sea Kayak Trail** has been developed by Argyll and Bute Council and Oban-based social enterprise Stramash. The route takes in the Crinan Canal, so Scottish Canals were also involved on that basis. These three canoe trails are described on the **Scottish Canoe Association website**. Scotland's fourth canoe trail is the **Scottish Sea Kayak Trail**, which was the idea of west coast paddler Simon Willis who produced a Pesda Press book on the trail as well as **a trail website**. A canoe trail created and written-up by an individual paddler, without the backing of government agencies, is evidence that there is no set-format that has to be adhered to.

A canoe trail should have a defined area of water and provide useful information for those wishing to paddle on that water, but there is no set-in-stone length of journey or list of organisations that need to be involved. As Simon Willis says at the end of his book: "A 'trail' implies some kind of way-marked or prepared route. In this instance, that is emphatically not the case. Instead, think of this as a virtual trail; a collection of knowledge clustered around a line on the map, to which I invite you to contribute."

### 5.3 Current use

It would be difficult to estimate the level of canoe and kayak usage of the lower Tay and Earn at the current time, but it is possible to identify the categories of users and the kind of activities that are undertaken on the two rivers.

The main user of the section of river around the centre of Perth is **Perth Canoe Club**. The club has regular Monday evening sessions and their favoured *access and egress point* is the slipway behind Stanners Island. Club use involves a wide range of activities from teaching beginners close to the island, playing on the rapids below Smeaton's bridge, running trips around **Moncreiffe Island** and paddling up the river to Scone Palace and beyond.

In terms of commercial operators using this stretch of water, the one regular user is Piotr Gudan of **Outdoor Explore**. Outdoor Explore uses the Willowgate Activity Centre at Stockgreen Lodge as a base for their kayak sessions and trips. The pond behind the building is used for beginners' sessions and the two main trips that paying groups are taken on are around Moncreiffe Island and from Willowgate to Newburgh. Outdoor Explore ran 84 trips in 2015 and in the period up to early July had run 70 trips in 2016.

Outdoor Explore has received support from the Perthshire Tourism Partnership, Perth City, Perth and Kinross Council and Visit Scotland. Furthermore, Piotr Gudan recently took a group of Visit Scotland regional managers on a trip around Moncreiffe Island, has been featured in an article in the Daily Mail and is hosting a symposium for the Polish Canoe Federation at the Willowgate Activity Centre in October 2016.

Perth College also operate their outdoor training sessions out of the Willowgate Activity Centre at Stockgreen Lodge.

Touring paddlers in small groups regard this area as a place for using the tide to assist them in making journeys by sea kayak or open canoe. A small number of paddlers make extended journeys from Killin or Kenmore through to Perth or Broughty Ferry. Others looking for a single day out will paddle from Perth to Newburgh, Balmerino or Broughty Ferry, or in the other direction up to Perth on a flooding tide. Others paddle from Bridge of Earn to Newburgh, or Perth to Bridge of Earn, or Bridge of Earn to Perth. The number of paddlers taking on these trips is hard to estimate as they are generally people who will be seldom seen and will simply park somewhere, launch and paddle to their destination.

Another group of paddlers worthy of mention are locally based people who will go out for an out-and-back paddle from Perth, Newburgh or Bridge of Earn. Newburgh is a popular launching spot for an evening paddle around Mugdrum Island for example. The **Carse Canoe Club** is based around the Carse villages such as Errol and St Madoes, and they often launch from Inchyra. Members of Tayside Sea Kayak Club and Fife Sea Kayak Club also use the lower Tay and Earn on occasions, and there has been a challenge within the Tayside Club to paddle from Perth to Broughty Ferry in the fastest possible time.

This review of the current use of the lower Tay and Earn does not provide an estimate for the number of paddlers on the river, but it should give a feel for the type and level of use at this time.

### 5.4 Potential use/ markets

In terms of estimating the potential increase in use of the rivers as a result of developing and promoting a canoe trail, it would again be difficult to estimate any hard numbers, but it should be possible to segment the market and suggest the types of user groups that would be likely to increase.

Promotion of a trail would be most likely to increase use of the river by paddlers from outwith the area. This increase would likely be from three main sources:

1. Non-paddlers looking for a guided trip on a section of the canoe trail,

2. Paddlers with their own equipment whose interest is raised by the trail's promotion and who visit the area to take a trip along the trail, and

3. Visiting paddlers looking to hire equipment in order to paddle on the trail.

The first of these market segments, non-paddlers looking for a guided trip, would provide more work and extra income for commercial operators in the area. This would be of benefit to **Outdoor Explore**, and it may provide sufficient extra work to support another commercial operator in the area.

Paddlers with their own equipment, but from outwith the Perth area, may well overlook the lower Tay and Earn at the moment and not consider it a worthwhile area to visit for a touring paddle. Promotion of the trail should awaken a latent interest from those who would become interested once they read about the trail on a website or leaflet. One possible scenario is that touring paddlers might begin to see the lower Tay and Earn as a destination for the shoulder seasons. A touring paddler in Scotland would be likely to prefer more adventurous and spectacular destinations like the west coast in summer, but might be keen to paddle on *the Lower Tay Canoe Trail in March, April, October or November*, for example. Experienced paddlers visiting the area without their equipment will look to hire equipment and seek a shuttle service. Local outfitters such as Go Kayaking and Tiso would be well-placed to service this market and offer advice to these paddlers. This would be another example of local businesses benefiting from the canoe trail and visiting paddlers benefiting from local businesses.

Increased use by local people should also be considered. A general increase in canoeing on the river might generate more interest in the activity and encourage some local people to take up canoeing and maybe join a local club. Others might seek to at least try the activity once and sign up for a commercial trip in order to say they have been on the canoe trail. Local organisations and companies might also see canoeing as a fun activity and potential day-out with friends or colleagues, so this could be another means by which local people make use of the trail in the future.

With more than half the Scottish population living within 90 minutes of Perth, the whole of the central belt should be considered as a potential market for the canoe trail. Indeed, many people within this area, especially young people, will be in the early stages of developing their canoeing skills and looking to build their skills in preparation for more adventurous trips. The canoe trail can therefore offer a first taste of canoeing for beginners, or a vital step in developing skills for those with some previous experience.

### 5.5 Commercial opportunities

One of the benefits of developing and promoting a canoe trail is the economic benefits to local businesses as a result of the increased tourism spending in the area. The economic benefits to a canoe guiding company are obvious, but there are also wider benefits to the accommodation sector when people stay overnight as part of a multi-day trip, and the catering sector when people purchase food and drinks during their visit to the area.

Economic benefits can be especially welcome in the more rural communities, so whilst there would be additional spending in Perth as a result of the trail, it is likely to have a more noticeable positive impact at Willowgate and in Newburgh, and perhaps to a lesser extent in Bridge of Earn.

The development of a new canoe trail can provide increased income for existing businesses, such as coffee shops in Newburgh for example, but the trail can also offer opportunities for the private sector to develop new business ventures. A taxi operator can offer a trailer service to take boats back to a group's start point, or a riparian landowner might seek to convert an old building on the river bank into a boat-in /boat-out bunkhouse or install a couple of wooden cabins. Other existing businesses, like River Edge Lodges in Bridge of Earn, could offer services to paddlers and might wish to promote their accommodation on **the canoe trail website**.

### 5.6 Conservation designations and invasive non-native species

The Tay estuary is an area of high conservation importance and has five nature conservation designations:

1. The **Inner Tay Estuary Site of Special Scientific Interest** (SSSI);

2. The **Firth of Tay and Eden Estuary Ramsar Site**;

3. The **Firth of Tay and Eden Estuary Special Protection Area** (SPA);

4. The **Firth of Tay and Eden Estuary Special Area of Conservation** (SAC); and

5. The **River Tay Special Area of Conservation** (SAC).

#### 5.6.1 SSSI and Ramsar

The Inner Tay Estuary was selected as a SSSI on account of its importance as a roost for internationally important numbers of wintering geese and as a breeding, migratory and wintering area for birds such as breeding bearded tit and breeding water rail linked with reedbeds, grazing marsh, saltmarsh, mudflats and sandbanks of the estuary and its margins, as well as the saltmarsh and reedbeds themselves — the latter forming a transition from saltmarsh through to freshwater fen and dry land. Consideration of the SSSl-only protected interests is not required under the Natura appraisal, however they should be considered as part of the proposal.

The development of a canoe trail into the SSSI would require Scottish Natural Heritage (SNH) to carry out an assessment of an operation requiring consent as their list of potentially damaging activities include: "Use of vehicles or craft likely to damage or disturb botanical or zoological interests" and "Recreational or research activities likely to damage botanical or zoological interests”.

The Firth of Tay and Eden Estuary Ramsar Site is designated for the following non-breeding birds: bar-tailed godwit, graylag goose, pink-footed goose and redshank. The Ramsar Site may also be affected by the canoe trail, but the interests of this designation overlap with the SPA, therefore can be fully addressed as part of the European sites appraisal.

#### 5.6.2 Natura designations — SPA and SAC

The Firth of Tay and Eden Estuary SPA is designated for 21 bird species, including marsh harriers.

The Firth of Tay and Eden Estuary SAC is designated for common seals, intertidal mudflats and sandflats, subtidal sandbanks and estuaries. The canoe trail is located well away from the areas where common seals haul out and forage, and so it is unlikely that there is any risk of disturbance from canoeists and kayakers on the trail.

The Firth of Tay and Eden Estuary SAC is contiguous with the River Tay SAC at the western end. The River Tay SAC is designated for otter, Atlantic salmon and three species of lamprey. The River Earn is not included within the River Tay SAC.

In Scotland, SACs and SPAs are given legal protection by the Conservation (Natural Habitats, &c.) Regulations 1994, as amended in Scotland (the "Habitats Regulations"). These Regulations ensure that any plan or project that may damage a Natura site - for example, a proposed development or an activity requiring a license - is first assessed and can only go ahead if certain strict conditions are met. This procedure is known as a Habitats Regulations Appraisal (HRA).

Consequently, the competent authority is required to consider the effect of the proposal on the SACs and SPA before it can be consented. The competent authority in this case is likely to be Perth and Kinross Council, as the access authority, although this would have to be confirmed with them. The SNH website has a summary of the legislative requirements at: (<http://www.snh.gov.uk/docs/A423286.pdf>) and further advice at: (<http://www.snh.gov.uk/protecting-scotlands-nature/protected-areas/international-designations/natura-sites/>). Advice obtained from SNH indicates that activities away from the river, such as the **production of a leaflet and/or website**, would also require to be assessed for their impact on the designated sites.

The HRA process has three steps. The first step is to determine whether the proposal is connected with or necessary for the conservation management of the site. As this is not the case here, the next consideration becomes step 2: Is the proposal likely to have a significant effect on the site? If so, step 3 requires a full assessment to determine whether the proposal will have no adverse impact on site integrity (taking into account the conservation objectives of the site). If it cannot be shown that there will be no adverse effect on site integrity, the proposal cannot go ahead.

In order to determine this, SNH recommend that the following information is obtained:

* Confirm the proposed route.
* In particular, identify *ingress, egress and stop-off points* since these are likely to be key point sources for potentially disturbing activities.
* Identify key sensitive locations from the perspective of the qualifying interests, particularly otter, harbour seal and bird species; an assessment of existing species data would be the first step which can be obtained through the National Biodiversity Network Gateway (<https://data.nbn.org.uk/> ), local records centre (<http://www.brisc.org.uk/Sources.php> ), BTO (<https://www.bto.org/volunteer-surveys/birdtrack/bird-recording> ) Tay Ringing Group (<http://www.tayringinggroup.org/> ); and the Sea Mammal Research Unit (SMRU) (<http://www.smru.st-andrews.ac.uk/> ).
* Overlay the map showing (ii) with that showing (iii); this will help to identify potential areas of conflict.
* Establish a disturbance baseline (i.e. not just from recreational activities, anything that can cause disturbance should be recorded along with any observed response from the qualifying interests/protected species. NB 'nil response' is still valuable information.).
* Provide projections for recreational usage (number, distribution, timing) in canoe-related activity that you would hope to see as a result of the proposed trail.
* Confirm proposed outputs (e.g. leaflet, website, other interest group websites, etc.).

#### 5.6.3 Implications of the designations for the canoe trail

The western (upstream) boundary of each of these four designated areas is at Cairnie Pier on the north bank of the river and the confluence with the River Earn on the south side of the river. Therefore, the canoe trail overlaps with these designated sites between Cairnie Pier and the Earn confluence downstream to Newburgh, covering a distance of about three kilometres. The SPA, SSSI and Ramsar designations are for terrestrial habitats and mudflats above mean low water springs, so the main channels of water are outwith these sites. The SAC designation is for the whole of the estuary from Cairnie Pier and Earn confluence out to the North Sea at Carnoustie and St Andrews. Given that most canoe and kayak traffic along this stretch of river tends to be more towards the south side of the river, the main issue to consider is advising paddlers to keep a recommended distance away from the bird interest, in this case breeding marsh harriers, along the reedbeds between the Earn confluence and Newburgh. Breeding marsh harriers are also on the north shore from Cairnie Pier eastwards, although, from personal experience and the fact that the north side is more hazardous because of the prevalence of mudflats, paddlers tend not to find that side of the river as interesting as the south side.

In considering the impact of canoeists and kayakers on the designated conservation areas, it should be recognised that there are already paddlers using this stretch of river, under Scottish access rights, and there is no evidence of those paddlers going into the sensitive reedbeds, so it is highly unlikely that one-off visitors in their own boats, or on guided trips, would seek to paddle into these locations.

#### 5.6.4 Invasive non-native species

A range of invasive non-native species (INNS) are found along the length of the canoe trail. The three main INNS worthy of note are giant hogweed, Himalayan balsam and Japanese knotweed. Giant hogweed, already discussed in 4.9 above, poses a health threat to the public, as touching the plant can result in burns to the skin. Japanese knotweed is the mostly likely INNS to be dispersed by canoeists and should therefore be the main one that is highlighted in any educational and promotional material. All Japanese knotweed plants are clones (i.e. no sexual reproduction) and it only requires a few grams of stem material to establish a new plant. It cannot set seed and is therefore dependent on physical damage or disturbance for dispersal. There is a high risk of it being dispersed by transportation in boats and on items of clothing and equipment.

Other dangers to consider are the need to prevent the salmon parasite **Gyrodactylus salaris** ever getting into the UK and of reporting any sightings of **North American signal crayfish** to the Rivers and Fisheries Trusts of Scotland (RAFTS).

#### 5.6.5 Promotion of conservation messages

Conservation issues should be built into an educational programme linked to the trail. The two key conservation issues that should be highlighted in this programme are the potential for disturbance to breeding birds in the reedbeds upstream of Newburgh and the risk of dispersing Japanese knotweed. Educational messages about breeding birds and Japanese knotweed could also encourage visiting paddlers and local guides to learn more about the issues on the Tay and Earn, which they can apply in other places, as well as on the Lower Tay Canoe Trail itself.

As well as these specific examples of conservation issues to build into the educational programme, the canoe trail should also provide an opportunity to promote the **Scottish Outdoor Access Code (SOAC),** **Scottish Marine Wildlife Watching Code (SMWWC)** and any other codes of best practice relevant to canoeing (see bibliography below).

The **Managing Recreation and Access pages** on **the SNH website** also provide further information and advice.

The canoe trail will also provide an opportunity to promote the **Check Clean Dry** campaign aimed at encouraging people to check their water craft, clothing and other equipment for signs of plant and animal material, and then to clean and dry it. **This video** aimed at canoeists **could be embedded onto the trail website.**

A useful piece of simple infrastructure that would make it easier for paddlers leaving the water to clean their boats and other equipment would be a washing facility at the Willowgate Activity Centre and also, if possible, at Newburgh. A washing facility at the Activity Centre would be an excellent way of demonstrating to Perth College students the importance of practicing good biosecurity measures.

**A canoe trail website** and leaflet would be useful places for highlighting the messages about taking precautions to avoid importing **Gyrodactylus salaris** into this country and remaining vigilant for signs of North American signal crayfish.

As already mentioned in 4.9 above, the dangers presented by giant hogweed should be highlighted in any promotional material on the trail.

### 5.7 Access and egress points

Thirteen possible parking/launching/stopping places were looked at during the course of the research for this study. The following table gives an indication of the suitability and potential use as part of the canoe trail.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Location** | **Grid ref.** | **Comments** | **Use** | **Promote** |
| Almondmouth | NO095265 | Launch spot could be improved | Park & launch | Yes |
| North Inch | NO120239 | Long portage to slipway | Launch | No |
| Stanners Island | NO122237 | Handy parking & good launching | Park & launch | Yes |
| Rodney | NO122233 | Launching varies with tide | Park & launch | No |
| Railway bridge | NO110238 | Good launching restricted parking | Park & launch | Yes |
| Fergusson Gallery | NO210230 | Pontoon not in place yet | Park & launch | Maybe |
| Waterski Club | NO120222 | Need to discuss with club | Park & launch | Maybe |
| Willowgate | NO133217 | Good for parking & launching | Park & launch | Yes |
| Elcho Castle | NO165211 | Need to discuss with HES | Stop | Maybe |
| Inchyra | NO184200 | Stopping place only | Stop/picnic | Yes |
| Cairnie Pier | NO197190 | Stopping place only | Stop/picnic | No |
| Newburgh | NO230184 | Good for parking & launching | Park & launch | Yes |
| Bridge of Earn | NO132183 | Launch spot could be improved | Park & launch | Yes |

Appendix B at the end of this report provides more detail on each of these 13 locations.

The existence of a launching spot is not a reason for its inclusion **on the canoe trail website or leaflet**. Limited parking spaces and lack of potential to take more parking in the future, could be reasons for not promoting a particular parking place. For this kind of reason, the most likely *access and egress points* to promote should be Almondmouth, Stanners Island, Willowgate, Newburgh and Bridge of Earn.

The railway bridge slipway in Perth could be promoted, but the busy road and relatively difficult parking should be highlighted. The suitability of the Fergusson Gallery pontoon will need to be assessed once it is in place. A discussion should be held with the Perth Waterski Club before their car park is promoted. Likewise, discussions should take place with Historic Environment Scotland before any landing is promoted at Elcho Castle. Perth and Kinross Council has a plan to install a new pontoon at Elcho Castle, although this may not happen, however it will be worth following that proposal to find out if landing at Elcho is going to become easier in the future. Parking in Bridge of Earn is currently on-street. Discussions could be held with the River Edge Lodges business to find out if parking could be arranged closer to the river.

Another access-related issue that emerged from the stakeholder consultation is the desirability to improve the riverside footpath alongside the River Tay between the Railway Bridge and Willowgate. This path has the potential to provide the public with another opportunity to enjoy the river, as well as providing friends, relatives and parents with the platform from which to view their family members and friends paddling on the canoe trail. However, it is acknowledged that there are issues preventing the improvement of this path, so it is unlikely to happen in the near future. The path is currently walkable, but at the time of writing no parties have plans to carry out any work on the path.

### 5.8 Educational opportunities

A canoe trail provides an opportunity to promote educational messages to visiting paddlers, as well as to canoe and kayak guides who are able to relay educational messages to their clients. **These educational messages can be promoted via a canoe trail website**, on a canoe trail leaflet and on riverside interpretation boards.

Canoe trails present a means of communicating educational messages that are taken on board and retained for future use in other locations, so a lesson learned because of a day on the **Lower Tay Canoe Trail** can be transferred to future days out on other rivers and lochs in other areas.

The **Lower Tay Canoe Trail educational programme** should include the following aspects:

* Information about the conservation value of the estuary and specific requirement to avoid disturbance to nesting birds;
* Advice relating to INNS with specific information about the dangers associated with Giant hogweed;
* To promote **Check Clean Dry** and specifically highlight the need to be aware of Japanese knotweed and to avoid transporting any stem material to other locations;
* Promote the **Scottish Outdoor Access Code** in order to convey the message that Scottish Access Rights are a balance of rights and responsibilities;
* The canoe trail is a great opportunity to interpret the history, geology, landscape and wildlife of the local area;
* Safety information should be a high priority on any trail-related media.

### 5.9 Infrastructure

A great deal of the work required to be carried out in the setting up of the canoe trail will be **in the development of a website and leaflet**, but there is also a need for physical work out on the ground. Consideration has been given to the requirement and desirability of new infrastructure that will help create a better and more enjoyable experience for visitors wishing to paddle on the canoe trail. The following is a list of facilities that could be developed, if the necessary funds are available.

* Improve the launching spot underneath the A9 on the River Almond;
* Improve the launching and landing spot under the bridge at Bridge of Earn;
* Install a pontoon to make it easier to land and visit Elcho castle;
* Improve the launching spot at Stanners island and look into the feasibility of creating a dam to provide a constant pool of water behind the island. This is a suggestion that should be discussed with Perth Canoe Club;
* Install Lower Tay Canoe Trail interpretation boards at Stanners Island, Willowgate, Newburgh and Bridge of Earn.

It should be noted that any works in the river would require notification to, and approval from, SNH and SEPA. This would be particularly relevant for the proposal to create a dam and pool behind Stanners Island.

A distinction also needs to be made between the aspects of the project that can be delivered during the initial development phase, such as website, leaflet and social media presence, and the longer-term infrastructure improvements and facilities such as slipways, launching and landing spots and signage.

### 5.10 Promotional channels

The **Lower Tay Canoe Trail** should be promoted using a range of channels, **including a website**, trail leaflet, riverside interpretation boards and **social media**.

**The canoe trails in Northern Ireland** provide a great example of high quality information in the **form of websites** and waterproof leaflets obtainable from tourist information centres. The Northern Ireland canoe trails demonstrate what is possible in terms of canoe trail promotion and provision of information, and provide a good example for the Tay Landscape Partnership to follow in developing a **Lower Tay Canoe Trail**.

**[IMAGE HERE]**

Five of the Northern Ireland canoe trail leaflets.

**[IMAGE HERE]**

The two sides of the Foyle canoe trail leaflet.

Other factors to consider in promoting the **Lower Tay canoe trail** are use of social media, riverside interpretation boards and ongoing promotion after the end of the Tay Landscape Partnership project ends in 2018.

**[IMAGE HERE]**

Interpretation board at Ganavan, near Oban, on the Argyll Sea Kayak Trail.

As previously mentioned in the Health and Safety section of this report, care would need to be taken to only provide information on a leaflet that will not change, or at least to warn that certain information could change and where to check for updated information. **Information that can change over time can be included on a website** as long as the website is kept up-to-date and the information updated when appropriate.

A useful addition to the promotional channels being employed would be to create **a two to three-minute video of the canoe trail**. **This could be embedded on the website** and promoted via social media. A video of the trail would be an effective means of inspiring people, whether they be paddlers or non-paddlers, to visit the area and paddle on the trail.

### 5.11 Coordination with other bodies

The stakeholder consultation aspect of this study came across a range of projects, plans and ideas for getting people onto the lower Tay and Earn. Water taxis, tourist boat trips, installation of pontoons, creation of a teaching pool, canoe shed and play wave were some of the projects and plans that were discussed, The Canoe Trail can fit in well amongst these other projects, but there will be a need for the Tay Landscape Partnership to liaise with others and work together for mutual benefit.

The Tay Landscape Partnership should continue to liaise on its canoe trail plans with the Tay and Earn Trust, Perth Canoe Club and Carse Canoe Club. Perth College and Historic Environment Scotland were contacted, but did not respond within the study period.

### 5.12 Ongoing trail management

An issue that should be addressed at an early stage is which body will eventually take on the management of the **Lower Tay Canoe Trail** after the Tay Landscape Partnership project has ended. The Perth and Kinross Countryside Trust (PKCT) and Tay and Earn Trust are possible bodies that could take on this task, but that should be considered and decided at the planning stage to avoid the trail being developed, then left to wither on the vine with nobody willing to take on the long-term responsibility.

## 6. Recommendations

Having concluded this study into the Lower Tay Canoe Trail, the following recommendations are suggested for the development and ongoing management of the trail.

**Health and Safety**

* Highlight health and safety issues in all promotional and education material linked to the canoe trail.
* Encourage beginner and intermediate paddlers to explore the trail with a qualified guide.
* **Promote the trail website** and leaflet as a hub for finding health and safety related information, such as tides, weather, ship movements and environmental hazards. Provide **a template risk assessment** form that paddlers using the trail in their own canoes and kayaks can make use of.
* Maintain **the trail website and ensure that all health and safety information is up-to-date**.
* Ensure that a trail leaflet does not contain information that could become out-of-date.
* Canoeists from Perth Canoe Club and Carse Canoe Club **should have an ongoing input into the health and safety messages on the trail website** and leaflet.

**Promotion**

* Health and safety advice should be at the core of all promotional and educational material for the canoe trail.
* Environmental information should be prominent in all canoe trail information in order to safeguard wildlife species protected by the various conservation designations.
* Invasive non-native species information should also be highlighted, with particular emphasis on the dangers of coming into contact with giant hogweed and of dispersing Japanese knotweed.
* **The canoe trail website** and leaflet will be appropriate places to promote the **Check Clean Dry campaign** aimed at preventing further spread of invasive non-native species on watersports equipment.
* The **development of a website** should be a high priority because accurate dissemination of information from one central source is a key element of a canoe trail. Care should be taken to keep information up-to-date and accurate.
* A leaflet should also be produced to promote the canoe trail, but care should be taken to avoid printing information that can change over time. Sources of such information should be given on the leaflet, so that people planning to paddle on the trail can access information that will be up-to-date.
* Social media platforms such as Facebook and Twitter should be used to promote the canoe trail, communicate information and develop a sense of community.
* Video marketing should be considered as a means of promoting the canoe trail. **A two to three-minute video embedded on the website** would be an appealing way of inspiring people to visit the area and sample the trail.

**Infrastructure**

* A series of gauges in the water would be useful for paddlers to link **the information on the trail website with what they see on the water**. Gauges could be placed at the top of Friarton Island, Friarton Bridge and Newburgh.
* The launching points on the Almond (under the A9) and under the bridge at Bridge of Earn could be improved to make it easier to get canoes and kayaks on and off the water. This is more likely to be an infrastructure improvement for a time in the future, rather than for the Tay Landscape Partnership to undertake during the development phase of the canoe trail.
* Elcho Castle is an obvious tourist attraction on the canoe trail and it would be a boost to the trail if it were possible to leave the water and walk to the castle. The Tay and Earn Trust has plans to install a pontoon at Elcho Castle and support should be given to help ensure that a pontoon is positioned there.
* Washing facilities at the Willowgate Activity Centre and Newburgh would be useful for enabling paddlers leaving the water to rinse their boats and equipment, thereby reducing the possibility of transporting INNS and waterborne diseases to other locations.

**Future management of the Lower Tay Canoe Trail**

* The Tay Landscape Partnership should ensure there is a plan in place for the future ongoing management of the canoe trail after the end of the current project in 2018. Another organisation taking on responsibility for the trail would need time to build it into their business plan.
* The Tay Landscape Partnership should work closely with Perth and Kinross Council, Tay and Earn Trust, Perth Canoe Club, Carse Canoe Club, Perth College, Perth Waterski Club and various other organisations and landowners/managers in order to coordinate the development of the canoe trail with other activities on the river.
* Ongoing community involvement in managing this kind of facility can provide a degree of passion and input of relevant ideas. With this in mind, it will be beneficial to form a permanent link between the body that manages the canoe trail and both Perth Canoe Club and Carse Canoe Club.
* The comment was made during the stakeholder consultation phase of this study that: "Perth is a city with its back to the river. The canoe trail provides a great opportunity for Perth to turn and face the river."

7. Bibliography   
 **Canoeing and kayaking** Great Glen Canoe Trail, Donald Macpherson, Pesda Press.   
 Scottish Sea Kayak Trail, Simon Willis, Pesda Press,   
 **Codes of good practice** Go canoeing, Good practice when canoeing.  
 Scottish Canoe Association — Paddlers’ Access Code.   
 Scottish Marine Wildlife Watching Code.   
 Scottish Outdoor Access Code.   
 Paths for all website. **Using inland water responsibly: Guidance for all water users**.

**Environment**Everything you wanted to know about Giant Hogweed but were too afraid to ask.   
**Soilutions**.   
**Habitat Survey—Inner Tay Estuary**. SNH. 2002   
Scottish Natural Heritage leaflet: Natura Sites and the Habitats Regulations. How to consider proposals affecting SACs and SPAs in Scotland. The essential quick guide. 2009.   
 Stop the Spread leaflet - **Check Clean Dry campaing**.   
 **Health and safety** MSN 1781 (M+F) **The Merchant Shipping (Distress Signals and Prevention of Collisions) Regulations 1996**.

8. Appendices   
 Appendix A - Canoe trail generic risk assessment template   
 Appendix B - Useful contacts   
 Appendix C - Canoe trail access and egress points   
 Appendix D - Map of Tay Landscape Partnership area and Lower Tay Canoe Trail landings and places of interest.

## Appendix A - Canoe trail generic risk assessment template

**Risk Assessment - Lower Tay Canoe Trail**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Date of assessment** | **Name of assessor** | **Checked by** | **Activity** | **Locations** |
|  |  |  | Canoeing/Kayaking | Rivers Tay and Earn Lower Tay Canoe Trail |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Serial** | **Hazard** | **Who's at risk** | **Control measures** | **Risk** | **Additional measures** | **Residual Risk** | **Managed by** |
| 1 | Drowning | Participants | Suitable PFD to be worn and fitted correctly at all time while on the water | Medium | Ensure river state is within the capabilities of the paddlers and everyone is confident in the water | Low | Group leader |
| 2 | Hypothermia | Participants and support crew | Suitable clothing for prevailing weather conditions | Low | Postpone activity if the weather is not suitable | Low | Everybody |
| 3 | Hyperthermia | Participants and support crew | Suitable clothing or the prevailing weather conditions day | Low | Ensure adequate supply and intake of fluids throughout the | Low | Everybody |
| 4 | Waterborne diseases | Participants and support crew | Ensure open cuts are covered and suitable launch and recovery sites are used | Low | Shower after activity | Low | Everybody |
| 5 | Sunburn | Participants and support crew | Use effective sunblock | Low | Cover up with clothing | Low | Everybody |
| 6 | Slips trips and falls | Participants and support crew | Inspect launch and recovery sites before use | Medium | Use proper footwear and plan launch and recoveries | Low | Everybody |
| 7 | Lifting operations, back injuries | Participants and support crew | Ensure lifting boats on and off trailers is done by a suitable number of people. Carrying of boats to and from the water by a suitable number of people | Medium | Plan boat movements to the water | Low | Everybody |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 8 | Capsize and entrapment | Participants | Ensure everyone is aware of capsize drills. Suitable rescue kit to be carried in every boat. | Medium | Particular care to be taken near overgrown banks and submerged logs | Low | Everybody |
| 9 | White water | Participants | Ensure everybody in the group is at an appropriate standard and able to deal with the small sections of white water | Medium | Check participants experience level | Low | Group leader |
| 10 | Head injuries | Participants | Consider the use of helmets both on and off the water, especially when loading high trailers or roof bars | Low | Everyone to be aware of the possibility of | Low | Everybody |
| 11 | Foot injuries | Participants | Use appropriate footwear at all times | Medium | May be necessary to change footwear for launching and recovery operations | Low | Everybody |
| 12 | Commercial boat traffic | Participants | Check with Harbourmaster before planning a trip | Medium | Keep a good lookout at all times whilst on the water. Keep well clear of any commercial boats | low | Everybody |
| 13 | Tidal flow | Participants | Check high water and low water times before planning a trip. River should be avoided if the river is in spate or the flood prevention scheme barriers are operational | Medium | Check river state and amount of fresh water coming down the river | Low | Everybody |
| 14 | Inability to contact emergency services | Participants | Marine DSC VHF is the preferred method of contacting the coastguard (Aberdeen) | Medium | Other methods to combat VHF black spots, mobile phone. Flares may also be considered. | Low | Everybody |

## Risk Assessment - Lower Canoe Trail

Notes or record of dynamic risk assessment:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **1st Review** | **2nd Review** | **3rd**  **Review** | **4th Review** | **5th Review** |
| **Planned review date** |  |  |  |  |  |
| **Reviewed by** |  |  |  |  |  |
| **Review date** |  |  |  |  |  |
| **Signed** |  |  |  |  |  |

## Appendix B - Useful contacts

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Organisation** | **Email** | **Telephone** |
| Julia Quin | SNH | Julia.Quin@snh.gov.uk | 01738444177 |
| Claire Smith | RSPB | Claire.BSmith@rspb.org.uk | 01738630783 |
| 07709480194 |
| Uwe Stoneman | RSPB | Uwe.Stoneman@rspb.org.uk | 01577862355 |
| Dave Girling | Perth College, UHI | david.girling.perth@uhi.ac.uk | 07810500775 |
| Jim Findlay | Tay & Earn Trust | jim\_findlay@tiscali.co.uk | 01738637245 |
| 07831820523 |
| Anthea Bircham & Karen Welch | Carse Canoe Club | anthea.bircham@gmail.com | 07791933146 |
| Eddie Palmer | Scottish Canoe Association | eddie.palmer@canoescotland.org | 01307820718 |
| 07768868764 |
| Carol Pudsey | Local Kayaker, geologist | carol\_pudsey@btinternet.com | 01250870119 |
| Christopher Jones | Historic Scotland | christopher.jones@hes.scot | 01786431324 |
| Dave Stubbs | PKC | DStubbs@pkc.gov.uk | 01738475347 |
| Kevin McHugh | Perth Canoe Club | kevin.mchugh@hotmail.co.uk | 07831469380 |
| Piotr Gudan | Outdoor Explore | info@outdoorexplore.org.uk | 07904324102 |
| Stuart Miller | Jet skiers |  | 07824666466 |

Appendix C — Canoe trail access and egress points

### A

**Location**Name: **Almondmouth**   
Grid reference: NO095265   
Canoe trail access and egress points   
Brief description: The adventurous start point for the canoe trail giving a longer paddle into Perth.

**Parking**Where can I park? On the Bertha Park road. Best parking space is next to cycle route 77 junction on the old almond bridge.

Are there any parking restrictions? E.g. charges, time limits etc. No.

How far do I have to carry my boat from my car to the water? 100 metres. Possible to launch under the old road bridge or under the new A9 Bridge. A9 is better launching spot, but slightly longer walk.

How many cars can be parked here? 4   
Is there space to park and turn a trailer? Yes

**Facilities** Where is the nearest public toilet or publicly available toilet? Tiso   
 Where is the nearest shop or café? Tiso

**Shuttle** Is there a bus route that I can use as a shuttle? Yes   
 Bus number: 4— commuter service. 70 — early morning. 23 & 27.   
 Route: 4 & 70 — Perth to Inveralmond. 23 — Perth to Aberfeldy. 27 —Perth to Ballinluig.

Nearest bus stop: Inveralmond Holiday Inn.

**Other** If this location is busy, where should I go instead? Over the old Almond bridge or on-street parking on the Inveralmond Industrial Estate. Ownership not known.   
What else do I need to know?   
Ownership? Not known.

### B

**Location**   
Name: **North Inch**   
Grid reference: NO120239   
Brief description: Broken slipway near the war memorial in the south east corner of North Inch.

**Parking**

Where can I park? Bell's Sports Centre or nearby on-street parking.   
Are there any parking restrictions? E.g. charges, time limits etc. Charges and time limits at Bell's Sports Centre.   
How far do I have to carry my boat from my car to the water? 700/800 metres from car park, but some people drop their boats off under Smeaton's bridge, then take their vehicles to nearby parking.   
How many cars can be parked here? Large car park, but busy at certain times.   
Is there space to park and turn a trailer? Yes

**Facilities**   
Where is the nearest public toilet or publicly available toilet? Bell's Sports Centre.   
Where is the nearest shop or café? Bell's Sports Centre.

**Shuttle**Is there a bus route that I can use as a shuttle? No   
Bus number:   
Route:   
Nearest bus stop:   
 **Other** If this location is busy, where should I go instead? On-street parking is free on some surrounding streets.   
 What else do I need to know? Lower half of slipway is damaged, but still usable.   
 Ownership? Perth and Kinross Council.

### C

**Location**   
 Name**: Stanners Island**   
 Grid reference: NO122237   
 Brief description: Quiet launching spot on west bank behind Stanners Island.

**Parking**Where can I park? Riverside car park, Norrie Miller Walk car park and metered street parking on Riverside and Commercial Street.  
 Are there any parking restrictions? E.g. charges, time limits etc. Charges and time limits.   
 How far do I have to carry my boat from my car to the water? 30 to 150 metres.   
 How many cars can be parked here? 67   
 Is there space to park and turn a trailer? Park no. Turn difficult.

**Facilities**Where is the nearest public toilet or publicly available toilet? Rodney Fitness Centre.   
Where is the nearest shop or café? Bridgend.

**Shuttle**Is there a bus route that I can use as a shuttle? Buses from town to outlying parts of the canoe trail.   
Bus number:   
Route:   
Nearest bus stop:

**Other**   
If this location is busy, where should I go instead? Rodney Fitness Centre or Water Ski Club car park.   
What else do I need to know?   
Ownership? Perth and Kinross Council own the left bank, but not the island.

### D

**Location**   
Name: **Rodney Fitness Centre**   
Grid reference: NO122233   
Brief description: Slipway below Rodney Fitness Centre car park.

**Parking**Where can I park? Rodney Fitness Centre car park.   
Are there any parking restrictions? E.g. charges, time limits etc. Charges and time limits.   
How far do I have to carry my boat from my car to the water? 100 metres.   
How many cars can be parked here? About 60.   
Is there space to park and turn a trailer? Park no. Turn yes.

**Facilities**Where is the nearest public toilet or publicly available toilet? Rodney Fitness Centre   
Where is the nearest shop or café? Town centre or Bridgend.

**Shuttle**Is there a bus route that I can use as a shuttle? Buses from town to outlying parts of the canoe trail.   
Bus number:   
Route:   
Nearest bus stop:

**Other**If this location is busy, where should I go instead? Riverside car park, Norrie Miller Walk car park,   
Riverside or Commercial Street.   
What else do I need to know?   
 Ownership? Perth and Kinross Council.

### E

**Location**   
Name: **Railway Bridge**   
Grid reference: NO110238   
Brief description: Large slipway on upstream (north) side of railway bridge. East (city centre) side of river.

**Parking**Where can I park? South Inch car park or Tay Street.   
Are there any parking restrictions? E.g. charges, time limits etc. Charges and time limits.   
How far do I have to carry my boat from my car to the water? 20 to 200 metresa   
How many cars can be parked here? Lots.   
Is there space to park and turn a trailer? Yes.

**Facilities**Where is the nearest public toilet or publicly available toilet? South Inch car park.   
Where is the nearest shop or café? Town centre.

**Shuttle**Is there a bus route that I can use as a shuttle? Buses from town to outlying parts of the canoe trail.   
Bus number:   
Route.   
Nearest bus stop:

**Other**If this location is busy, where should I go instead? Perth Waterski Club.   
What else do I need to know?   
Ownership? Perth and Kinross Council own the slipway.

### F

**Location**   
Name: **Fergusson Gallery**   
 Grid reference: NO210230   
 Brief description: New pontoons due to be installed later in 2016.

**Parking**Where can I park? South Inch car park.   
Are there any parking restrictions? E.g. charges, time limits etc. Charges and time limits.   
How far do I have to carry my boat from my car to the water? 150 to 200 metres.   
How many cars can be parked here? Lots.   
Is there space to park and turn a trailer? Yes.

**Facilities**Where is the nearest public toilet or publicly available toilet? South Inch car park.   
Where is the nearest shop or café? Harbour café or in town,

**Shuttle**Is there a bus route that I can use as a shuttle? Buses from town to outlying parts of the canoe trail.   
Bus number:   
Route:   
Nearest bus stop: Edinburgh Road,

**Other**If this location is busy, where should I go instead? Perth Waterski Club.   
What else do I need to know?   
Ownership? Perth and Kinross Council.

### G

**Location**   
Name: **Waterski Club**   
Grid reference: NO120222   
Brief description: Slipway and pontoon used by Perth Waterski Club.

**Parking**Where can I park? Car park next to the slipway.   
Are there any parking restrictions? E.g. charges, time limits etc. No charges or time limits.   
How far do I have to carry my boat from my car to the water? 10 metres.   
How many cars can be parked here? 15.   
Is there space to park and turn a trailer? Yes.

**Facilities**Where is the nearest public toilet or publicly available toilet? South Inch car park.   
Where is the nearest shop or café? Harbour Café.

**Shuttle**Is there a bus route that I can use as a shuttle? Buses from town to outlying parts of the canoe trail.   
Bus number:   
Route:   
Nearest bus stop: Edinburgh Road.

**Other**If this location is busy, where should I go instead? South Inch car park or Stanners Island.   
What else do I need to know? A metal frame gate at the top of the slipway is usually locked, but boats   
can be easily lifted over or pushed under.   
Ownership? Perth and Kinross Council / Common Good.

### H

**Location**Name: **Willowgate**   
Grid reference: NO130217   
Brief description: Parking and launching facilities beside the Tay and Earn Trust buildingsa

**Parking**   
Where can I park? Willowgate cafe car park.   
Are there any parking restrictions? E.g. charges, time limits etc. Yes. Priority is for visitors to the café.   
Parking for up to 4 cars may be available, but best to make arrangements in advance with the café.   
Parking at the nearby Willowgate Activity Centre is likely to be a more reliable option.   
How far do I have to carry my boat from my car to the water? 20 metres.   
How many cars can be parked here? 4.   
Is there space to park and turn a trailer? Yes.

**Facilities**   
Where is the nearest public toilet or publicly available toilet? Willowgate Café.   
Where is the nearest shop or café? Willowgate Café.

**Shuttle**   
Is there a bus route that I can use as a shuttle? Yes.   
Bus number: 16 and 16A.   
Route: Dundee to Perth via Walnut Grove.   
Nearest bus stop: Walnut Grove.

**Other**   
If this location is busy, where should I go instead? Perth.   
What else do I need to know? New pontoon being installed here later in 2016.   
Ownership? Tay Salmon Fisheries Company Limited.

### I

**Location**   
Name: Willowgate Activity Centre at Stockgreen Lodge   
Grid reference: N0133217   
Brief description: Parking and launching facilities beside the Tay and Earn Trust buildings.

**Parking**Where can I park? Tay and Earn Trust car parking.   
Are there any parking restrictions? E.g. charges, time limits etc. Yes. Advice is to make arrangements in advance by calling the Tay and Earn Trust on 07831 820 523,   
How far do I have to carry my boat from my car to the water? 20 metres.   
How many cars can be parked here? Space for about 10 cars, except when other events are taking place, hence the need to make contact in advance.   
Is there space to park and turn a trailer? Yes,

**Facilities**Where is the nearest public toilet or publicly available toilet? Tay and Earn Trust building if manned, or Willowgate Café.   
Where is the nearest shop or café? Willowgate Café.

**Shuttle**Is there a bus route that I can use as a shuttle? Yes.   
Bus number: 16 and 16A.   
Route: Dundee to Perth via Walnut Grove.   
Nearest bus stop: Walnut Grove.

**Other**If this location is busy, where should I go instead? Perth.   
What else do I need to know?   
Ownership? Tay Salmon Fisheries Company Limited.

### J

**Location**   
Name: **Elcho Castle**   
Grid reference: N0165211   
Brief description: A possible landing place, but not an access or egress point.

**Parking**Where can I park?   
Are there any parking restrictions? E.g. charges, time limits etc.   
How far do I have to carry my boat from my car to the water?   
How many cars can be parked here?   
Is there space to park and turn a trailer?

**Facilities**Where is the nearest public toilet or publicly available toilet?   
Where is the nearest shop or café?

**Shuttle**Is there a bus route that I can use as a shuttle?   
Bus number:   
Route:   
Nearest bus stop:

**Other**If this location is busy, where should I go instead?   
What else do I need to know? Possible landing place, but not an access or egress point.   
Ownership? Not known.

### K

**Location**   
Name: **Inchyra**   
Grid reference: N0184200   
Brief description: Dundee University Boat Club launching spot. Picnic and landing place, but not good for parking.

**Parking**Where can I park? No parking available.   
Are there any parking restrictions? E.g. charges, time limits etc. Yes. Nowhere for the public to park.   
How far do I have to carry my boat from my car to the water?   
How many cars can be parked here? None.   
Is there space to park and turn a trailer?

**Facilities**Where is the nearest public toilet or publicly available toilet? None.   
Where is the nearest shop or café? St Madoes and Glencarse.

**Shuttle**Is there a bus route that I can use as a shuttle?   
Bus number:   
Route:   
Nearest bus stop:

**Other**If this location is busy, where should I go instead?   
What else do I need to know? Good place for a leg stretch and lunch stop. Muddy at low tide.   
Ownership? Not known.

### L

**Location**   
Name: **Cairnie Pier**   
Grid reference: N0197190   
Brief description: A picnic spot and place to rest rather than a launching spot.

**Parking**Where can I park? No parking available.   
Are there any parking restrictions? E.g. charges, time limits etc. Yes. Nowhere for the public to park.   
How far do I have to carry my boat from my car to the water?   
How many cars can be parked here?   
Is there space to park and turn a trailer?

**Facilities**Where is the nearest public toilet or publicly available toilet? None   
Where is the nearest shop or café? St Madoes and Glencarse.

**Shuttle**Is there a bus route that I can use as a shuttle?   
Bus number:   
Route:   
Nearest bus stop:

**Other**If this location is busy, where should I go instead?   
What else do I need to know? Lots of giant hogweed, so not a good place for landing if there are children or dogs in a group. Muddy from mid-tide downwards.  
Ownership? Tay Salmon Fisheries Company Limited.

### M

**Location**   
Name: **Newburgh**   
Grid reference: N0230184   
Brief description:

**Parking**Where can I park? Grass car park on riverbank and beside slipway.   
Are there any parking restrictions? E.g. charges, time limits etc. No.   
How far do I have to carry my boat from my car to the water? 10 metres.   
How many cars can be parked here? 20.   
Is there space to park and turn a trailer? Yes.   
**Facilities**Where is the nearest public toilet or publicly available toilet? Newburgh.   
Where is the nearest shop or café? Several in Newburgh.

**Shuttle**Is there a bus route that I can use as a shuttle? Yes.   
Bus number: 36   
Route: Perth to Glenrothes,   
Nearest bus stop: Newburgh Main Street.

**Other**   
If this location is busy, where should I go instead? Unlikely to be busy.   
What else do I need to know?   
Ownership? Not known.

### N

**Location**   
Name: **Bridge of Earn**   
Grid reference: N0132183   
Brief description: Launching under bridge on river right.

**Parking**Where can I park? On street parking in Bridge of Earn.   
Are there any parking restrictions? E.g. charges, time limits etc. No, but may have to park some distance from river.   
How far do I have to carry my boat from my car to the water? 200 metres.   
How many cars can be parked here? Difficult to estimate.   
Is there space to park and turn a trailer? Yes.

**Facilities**Where is the nearest public toilet or publicly available toilet?   
Where is the nearest shop or café? Brig Farm Shop.

**Shuttle**Is there a bus route that I can use as a shuttle? Yes.   
Bus number: 36, 56 and 17.   
Route: 36 Perth to Glenrothes. 56 Perth to Halbeath. 17 Perth to Gleneagles.   
Nearest bus stop: Dunbarney Primary School in Bridge of Earn.

**Other**If this location is busy, where should I go instead?   
What else do I need to know? Car park at entrance to Moncreiffe House on junction to Rhynd road is often locked, so cannot be relied upon for public parking.

Ownership? Not known.