

Merkinch Local Nature Reserve Management Plan 2015 - 2018



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for Merkinch Greenspace

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Summary

Merkinch Local Nature Reserve was declared on 28 November 2007 after the signing of a formal agreement between The Highland Council and British Waterways (now Scottish Canals) on 14 November 2007. It is currently the only Local Nature Reserve in The Highland Council area.

Merkinch Local Nature Reserve consists of 54.7 hectares of land and foreshore to the west of where the River Ness enters the sea. To the south it is bounded by the Caledonian Canal, where that enters the Beaully Firth; to the north west by the boundary of the Carse Industrial Estate and to the east by the main housing area of Merkinch. The northern boundary is down to the low water (spring) mark.

This management plan will build on the initial 2008 plan and will

- explain how the site will be managed in its next phase, and why;
- describe responsibilities;
- evaluate the current situation;
- set outcomes and evaluation systems;
- identify resources.

The timescale for the production of the Plan was flexible, and this allowed a full consultation exercise, with training for Merkinch Greenspace Directors, a visit to an equivalent Local Nature Reserve in the central belt, a public consultation day and 118 questionnaires being completed and returned. The information gleaned from those involved has been invaluable in determining the future direction of management for the Reserve. The author of this revised Plan expresses thanks to all those who have helped.

Main points raised by the local community:

- The majority of those sampled are aware of the existence of the Reserve
- Fifty three percent of questionnaire respondents are regular visitors to the Reserve.
- The majority of questionnaire respondents feel proud of the Reserve and feel safe when visiting it. Of those that don't feel safe, the commonest reasons given are fear of motorbikes and of dogs.
- The most popular activity on the Reserve is walking, closely followed by watching wildlife.
- When asked to select the single most important purpose of the Reserve, most people chose management for wildlife.
- When asked whether they wanted: dedicated Reserve staff; more / better paths; more / better wildlife watching facilities; more seating; more Reserve events; more / better

signage, all of these were popular, the greatest demand being for improved wildlife watching provision. Other ideas included a play park, litter bins, litter picking events, a tea room / toilet block, shelters, dog bins, cutting back of vegetation, visits from a dog warden and a barbeque site.

- Far more people mentioned things they liked about the Reserve than aspects that they did not. Of the “likes”, wildlife was the most popular, followed by local greenspace, peace / quiet, and scenery. The most common dislike was dog fouling, followed by litter.
- Suggested improvements to the Reserve area include: provision of wildlife watching facilities such as hides; additional seating in the “amphitheatre” area; continued cutting back of vegetation where this impedes access along paths.

Other important issues relating to the management of the Reserve are as follows:

- The level of knowledge of the biological assets of the Reserve is gradually improving, but remains limited.
- The Reserve is subject to some anti-social behaviour, with dog fouling and littering being the most significant.
- The Reserve remains little known outside the Merkinch community, although it is now shown on the Scottish Natural Heritage on-line map of Local Nature Reserves <http://www.snh.gov.uk/protecting-scotlands-nature/protected-areas/local-designations/lnr/> , and productive contact has been made with the managers of Duchess Wood Local Nature Reserve in Helensburgh.
- The provision of the old ticket office as a focus for environmental and heritage education remains under threat. A proposal to rebuild on that site has been curtailed owing to a contaminated land issue identified by the Scottish Environment Protection Agency. It is now possible that The Highland Council will sell the ticket office and associated land to the Whale and Dolphin Conservation Trust.

The Reserve is within walking distance of the main housing areas of Merkinch, South Kessock and the village of Clachnaharry. This comprises a total population of approximately 12,000 and is within 5 km of the majority of the population of the City of Inverness (79,200 in 2011).

The Reserve has no national conservation designations directly applicable to the site, but is recognised as being of local value for wildlife. The Low Water Mark is the southern boundary of the Moray Firth European Special Area of Conservation (SAC)

http://gateway.snh.gov.uk/sitelink/siteinfo.jsp?pa_code=8327 – for protecting the northern bottle-nosed dolphins and sub-tidal sandbanks. To the west of Clachnaharry is the Inner Moray Firth Special Protection Area (SPA) http://gateway.snh.gov.uk/sitelink/siteinfo.jsp?pa_code=8515 and

RAMSAR site http://gateway.snh.gov.uk/sitelink/siteinfo.jsp?pa_code=8430 These are European protected sites for birds and sediment features.

The Reserve is mainly owned by The Highland Council and is managed by the Merkinch LNR Management Group, consisting of Directors of Merkinch Greenspace and representatives of relevant agencies. There are no members of staff currently dedicated to the management of the Reserve.

In keeping with the previous management plan, the following aims are recommended:

Reserve Aims

These are overarching aims which the Reserve must deliver on if it is to achieve its vision of being the best Local Nature Reserve in Scotland: a place where people and biodiversity co-exist to each other's mutual benefit.

1. To increase the health and well-being benefits to individuals and communities through active involvement with the Reserve.
2. To celebrate the wildlife value of the reserve through the conservation and sustainable management of its habitats and species.
3. To maximise the learning opportunities afforded by the reserve, and to communicate the importance of wildlife to the local community, Inverness residents and visitors to the area.
4. To improve and upgrade access provision to and within the reserve.
5. To establish governance for the reserve that will sustain its management through innovative access to funding sources.
6. To deliver best practice management for a Reserve that will be an example for other reserves.

A total of 48 Objectives and 69 Measures have been identified that will go towards delivering these aims.

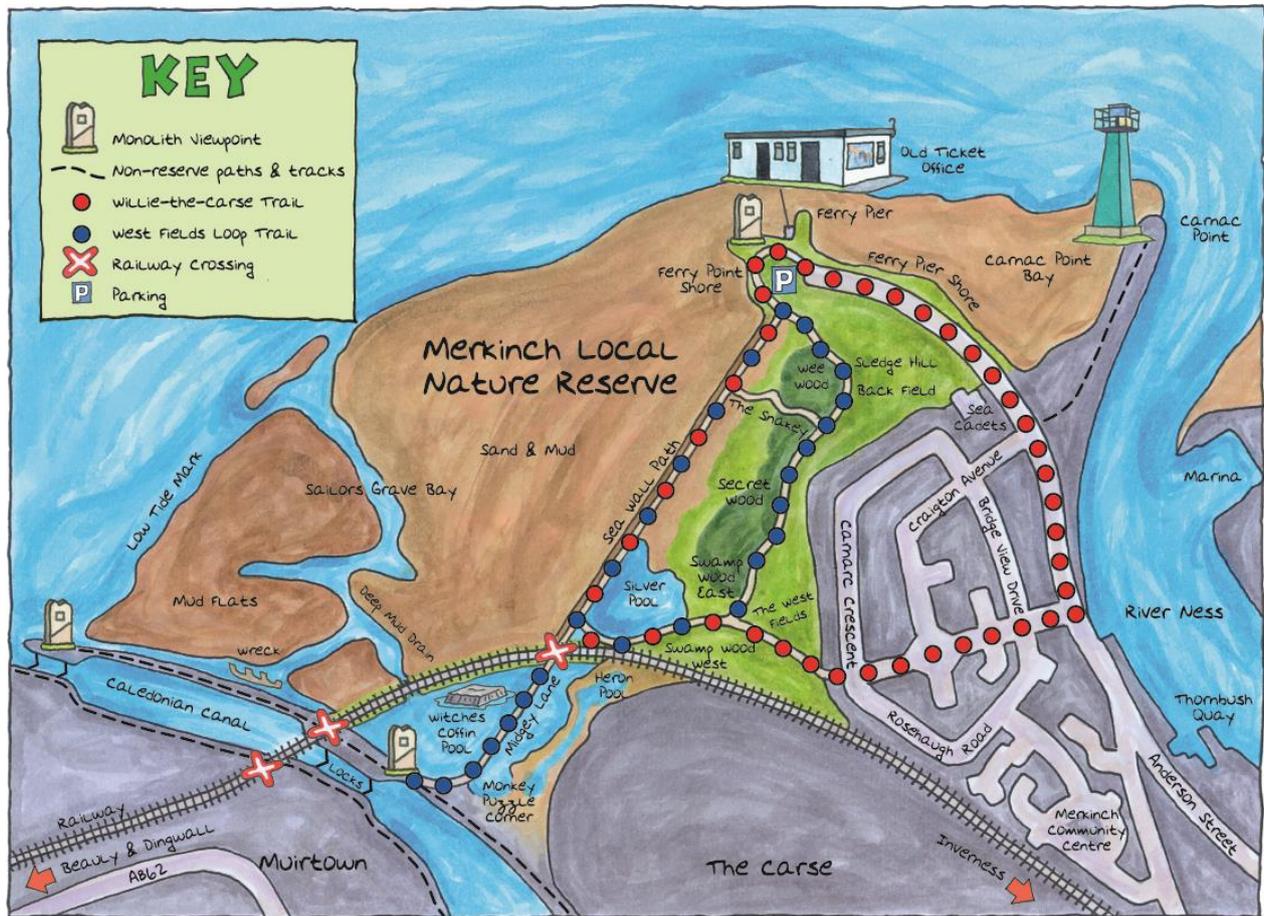
The following are some of the key measures identified:

- Installation of additional seating and bird hides
- Links made with local GP surgeries, The Conservation Volunteers Green Gym and other organisations to reinforce the health benefits of activity within the Reserve
- Appointment of Local Ranger Development Project Officer
- All interpretation (on- and off-site information) is consistent with the Reserve Interpretation Plan
- A comprehensive programme of annual Reserve events is offered

- A clear welcome point is established in partnership with the Space by the Water Project (if bid successful)
- Paths are adequately maintained, at a width of 2.1 metres where mixed use is required
- Access to the Reserve from the Caledonian Canal end is improved to allow all abilities to gain entry
- Dog behaviour on the Reserve is effectively managed
- A Friends of Merkinch LNR group is established, to be funded by donations from members
- A number of local people are employed who are central to delivery of the management plan
- The number of visitors to the Reserve is monitored annually

1. Introduction

Merkinch Local Nature Reserve was declared on 28 November 2007 after the signing of a formal agreement between the Highland Council and British Waterways on 14 November 2007. It is the only Local Nature Reserve in the Highland Council area and was, at the time, the 50th in Scotland.



Map showing the main features of the Reserve and produced with the help of local children during the writing of the Reserve's interpretation plan. ©Ross Associates/Interpretation 2009.

Local Nature Reserves (LNRs) are areas of land designated by local authorities under Section 21 of the National Parks and Access to the Countryside Act 1949. More information can about this designation can be found at <http://www.snh.gov.uk/protecting-scotlands-nature/protected-areas/local-designations/lnr/>

This management plan will build on the initial 2008 plan and will:

- explain how the site will be managed in its next phase, and why;
- describe responsibilities;
- evaluate the current situation;
- set outcomes and evaluation systems;

- identify resources.

Management planning is a process, the output of which will be a 'fit-for-purpose' management plan. The purpose of the management plan is to set out what management will be undertaken and how this will be achieved.

This Management Plan has been drawn up to meet the needs of Merkinch Greenspace Directors and the Merkinch Local Nature Reserve Management Group that comprises representatives of The Conservation Volunteers, The Highland Council, Scottish Canals, Scottish Waterways Trust and Scottish Natural Heritage.

The plan was prepared during the period May 2014 – March 2015 with the assistance of the above named groups and organisations and many community members and activists. The timescale for the production was sufficient for a full consultation exercise, and the information gleaned from those involved has been invaluable in determining the future direction of management for the Reserve.

The author of the Plan wishes to express thanks to all those who have helped.

2. Vision Statement

The Management Group have a vision for what the Reserve can achieve in the next 10 years. This is as follows:

To create the best Local Nature Reserve in Scotland: a place where people and wildlife co-exist to each other's mutual benefit.

With support from the community, from partners and from funders it is believed that the Local Nature Reserve can achieve the following outcomes:

Merkinch Local Nature Reserve in 2025

Merkinch Local Nature Reserve is 18 years old and is now seen as one of the most important local assets for the communities of Merkinch and Clachnaharry. It is widely recognised as the best Local Nature Reserve in Scotland: a place where people and wildlife co-exist to each other's benefit.

Fifteen years ago, the Reserve was scarcely known outside of the local community and many local people did not visit it. Today, people from other communities in Inverness come to enjoy the views, the walks and the wildlife. Many visitors to the City find the Reserve to be a surprising green haven away from the hustle and bustle of the City centre. The Reserve is often an unexpected highlight for visitors making longer journeys around Inverness on foot or by cycling. Having encouraged those outside the local community to take access to the Reserve, the pride of Merkinch residents in their Reserve has grown, and with it their self-esteem. At the same time, the stigma associated with the Merkinch and South Kessock areas is no longer detectable. Local people, through their involvement with the Reserve, have noticed improvements to their physical health, and have come to recognise the site as somewhere they can come to reduce their stress levels. Incidence of smoking, stroke, alcohol use, self-harm and cancer have reduced substantially throughout Merkinch.

Key to this transformation has been the people of Merkinch taking the Reserve to their heart. They have developed a sense of care and pride that has ensured that the Reserve is well loved and carefully managed, by them, for all the community and for the wonderful array of wildlife supported by the Reserve. It is the development of local skills and expertise in management within the community that is one of the greatest testaments to the success of the last 15 years. There are now 250 Friends of Merkinch Local Nature Reserve, who all pay a subscription that helps with the management costs of the Reserve. New residents in recently built houses adjacent to the Reserve receive a year's gift subscription, and carry out informal surveillance through being able to overlook the Reserve.

There are now records of the 200+ bird species that are shared with the many bird watchers that use our hides. The study of the delicate balance between the freshwater and saltwater vegetation

is now in its 8th year and is yielding interesting results that are helping scientists understand the effects of sea level changes in the Beaully Firth. The Reserve is also proud to have just celebrated its 5th PhD student who has worked on the site, and the partnership with the Inverness Campus of the University of the Highlands and Islands goes from strength to strength. Studies of the fascinating invertebrates on the Reserve are regularly revealing new species, and it is one of the key sites within the Highland Biological Recording system. When it comes to wildlife, there is always something happening!

The work that local schools have undertaken on the Reserve has meant that all local children have grown up with the Reserve as their local outdoor laboratory. The Highland Council Countryside Rangers have been a huge help with this work too. Creating the Learning Space on the Reserve website and the Virtual Library have contributed to this, and young students from the early years are now helping as adults, to ensure their kids get the same enjoyment from the Reserve as they did. Everything about the Reserve is helping the local community understand their relationship with the environment and helping to demonstrate the benefits of sustainable living.

For many, a visit to the Reserve is not about learning or wildlife – it is just about enjoying a walk in a safe and beautiful environment with wide horizons over the sea to the mountains beyond. The early upgrading of the paths was a major stepping stone for the Reserve in opening up the area up to a wider audience. It was through visiting and seeing first-hand what the Reserve has to offer that the community got behind the developments that we see today.

For many the highlight of the Year is the Annual Reserve Celebration – and it is many things but it is not reserved! This has now become the key event for celebrating the wildlife diversity of the whole City and Merkinch is rightly proud of this responsibility. Merkinch has become “twin” with Duchess Wood LNR in Helensburgh, and the Duchess Wood management committee are regular attendees at these annual events, to mutual benefit.

Perhaps the greatest achievement is that it is the community itself that has brought all this to reality through its hard work and commitment. A few people at the beginning had vision and managed to pass this onto others who could share this, and the web of those involved spread. Now the management group are regularly called on to share their experiences and knowledge with others locally and further afield at places such as Duchess Wood and elsewhere. What they have achieved is widely recognised as an outstanding example of community action benefiting all.

Merkinch Local Nature Reserve truly is a place where people and wildlife coexist to each other's benefit.

3. Methods used in this plan

The production of this plan has been focussed as much on process as on content. This was at the request of Merkinch Greenspace, who wished to build skills and capacity in their own group and in the local community.

The process began by agreement of a project brief with Merkinch Greenspace Directors. This was immediately followed by an initial evaluation questionnaire that was completed by the majority of the Directors. The format of this questionnaire is shown at Appendix 1.

The returns from this questionnaire demonstrated that Directors felt that they lacked knowledge of the wildlife on the Reserve as well as the associated habitats, and how these should be managed. There was also uncertainty about the issue of people management, and a strong desire to learn from other Local Nature Reserves.

At a later Reserve management group meeting, the content of a public questionnaire was agreed in order to ascertain the community desires for the Reserve. It was felt important to approach some community members with no knowledge of the Reserve, in order to estimate the proportion of the population who were aware of its existence. This questionnaire was widely circulated, mainly by Directors, at Reserve and “Go Wild on the Canal” fun days, local shops, Merkinch Work Club, local primary and secondary schools and Reserve visitors. The results of the consultation are summarised at Appendix 2.

In August 2014, Directors visited Duchess Wood Local Nature Reserve in Helensburgh. This site was chosen for the following reasons:

- It is, like Merkinch LNR, mainly managed by volunteers
- There are some management issues in common, in particular dog control
- It is located, like Merkinch LNR, close to housing
- The willingness of the Committee of Duchess Wood LNR to show their site to Merkinch Greenspace Directors

This was a valuable opportunity for the managers of the two Reserves to share experiences, and ideas were gleaned from Duchess Wood that appear in the objectives below.

The issue of perceived lack of understanding of the wildlife and associated habitats was addressed with the help of The Highland Council’s Ranger Service and Biodiversity Officer. An evening walk round the Reserve for Directors (and any other local people who wished to attend) took place in September 2014, with Directors being shown some of the key species and habitats on the Reserve and having the opportunity to discuss their management as well as some of the people management issues. It was felt that this exercise should be repeated quarterly in order to take account of seasonal changes, and it has thus been incorporated into Objective 3 c below.

A drop-in community consultation day was held at Merkinch LNR in October 2014. This was based at the old ticket office, but participants also had the opportunity to walk around the Reserve and to discuss their views on the required objectives for the new management plan. Later in the day, large maps of the Reserve were used with post-it notes to identify strengths, weaknesses, threats and opportunities.

Throughout the consultation process, the author has taken guidance from Merkinch Greenspace Directors and members of the LNR management group at their regular meetings, and has also had face-to-face meetings with a number of agencies with interests in the management of the Reserve.

4. Site Description

The site is well described in the previous management plan

http://www.merkinchlnr.org.uk/pdf/Merkinch_LNR_Management_Plan_Final_March_2008.pdf and the reader is referred to that document for further information. Additional notes are provided here, under the same headings, where there has been significant change since 2008.

Site ownership

Muirtown Basin (the section of the Caledonian Canal adjacent to the Reserve) is owned by British Waterways, trading as Scottish Canals, who are represented on the current LNR management group.

Access to Reserve

The entire population of the City of Inverness is now 79,200 (2011 census).

Bus access is available through a regular half-hourly service from the City Centre (No 9) during the day and an hourly evening service (No 8a / 8c). Car parking for 15 cars is available at the turning circle at South Kessock and there is also parking at the south end of Muirtown Locks (800 m from Reserve entrance). There is very restricted parking at Clachnaharry village.

Hydrology

A hydrological survey was carried out in 2008 following the production of the initial Reserve management plan. A map summarising the survey report is provided at Appendix 3.

Biological Information

The Reserve has no conservation designations applicable to the site. The Low Water Mark is the southern boundary of the Moray Firth Special Area of Conservation – for the population of the northern bottle-nosed dolphins and its sub-tidal sand banks. Further information can be found at http://gateway.snh.gov.uk/sitelink/siteinfo.jsp?pa_code=8327 To the west of Clachnaharry is the Inner Moray Firth Special Protection Area / RAMSAR site for birds, another EU designation. Further details can be found at http://gateway.snh.gov.uk/sitelink/siteinfo.jsp?pa_code=8515 and http://gateway.snh.gov.uk/sitelink/siteinfo.jsp?pa_code=8430

Species Information

A significant update to species information was made in the Biodiversity Management Plan for Merkinch LNR. This is available at

http://www.merkinchlnr.org.uk/pdf/Merkinch_Biodiversity_Management_Plan_2009.pdf

There have also been 28 additional records submitted to Highland Biological Recording Group since the production of the first management plan. These are shown in Appendix 4 by courtesy of Murdo MacDonald.

Current usage

At the time of the preparation of this plan and from the questionnaire returns, the main reasons for visiting the Reserve area are, in order of popularity:

- Walking
- Wildlife watching
- Dog walking
- Duck feeding
- Cycling
- Playing
- Sport

There is one dog waste bin at the turning circle, another on the sea wall and a third near the “Willie the Carse” path. There is also one on the canal bank, not far from the access path to the Reserve.

The boardwalk and paths through the woods are used more than was stated in the last management plan, and apparently with increased confidence.

Whilst there continues to be some problem with illegal use of the Reserve by motor bike riders, the situation has to a large extent been brought under control by installing width restrictions at four positions along the sea wall. There is still a seasonal problem with motorbike access being taken on grassy areas.

Interpretation, educational and other facilities

There have been a series of panels / boards near the turning circle, none of which remain today. The PathsInverness finger posts are in place, as is one small “welcome” sign to the Westfield. There is also a sign in the roundabout at the turning circle, which was installed by Merkinch Greenspace. In response to the previous management plan, stone monolith signs have been installed at either end of the Reserve.

Merkinch LNR is currently publicised through its own website <http://www.merkinchlnr.org.uk/> , through the Scottish Natural Heritage LNR web page <http://www.snh.gov.uk/protecting-scotlands-nature/protected-areas/local-designations/lnr/> , through the DiscoverExplore website <http://www.discoverexplore.co.uk/locations/merkinch-local-nature-reserve> , has been favourably reviewed on TripAdvisor http://www.tripadvisor.co.uk/Attraction_Review-g186543-d3804550-Reviews-Merkinch_Local_Nature_Reserve-Inverness_Scottish_Highlands_Scotland.html , appears

on various wildlife and walking fora and has its own Facebook page that is actively maintained by local people <https://www.facebook.com/MerkinchLNR>

The overall level of use is monitored by the Ranger service using people counters. In 2009, 26,678 passes were recorded at the ferry turning circle, 36,206 at the Caledonian Canal and 18,774 on the boardwalk across the lagoon.

Surrounding communities and relationship to other greenspace

The previous management plan

http://www.merkinchlnr.org.uk/pdf/Merkinch_LNR_Management_Plan_Final_March_2008.pdf

thoroughly explored the relationship between Merkinch LNR and the Inverness Greenspace Strategy that was being developed at the time. The issues remain largely relevant, but with the winding up of GreenInverness (authors of the Greenspace Strategy), other local projects have come to the fore. The most recent and significant initiative has been the Muirtown and South Kessock Charrette that was held in February 2014. The report from this Charrette has been adopted as supplementary guidance by The Highland Council. The general aim of the Charrette is to seek better connections between communities and their waterfronts. From this has arisen the Space by the Water Project, for which The Highland Council, in partnership with Scottish Canals, is seeking funding from the Scottish Government Green Infrastructure fund in order to enhance the facilities and access routes within the Reserve as well as improving links with other greenspace such as the Caledonian Canal, the River Ness and Creag Phàdraig. The project also incorporates proposals to enhance water sports facilities on the Caledonian Canal and to develop viewpoint and access provision to the east of the Reserve including Carnarc Point. Liaison with the Space by the Water Project will be a key objective in this management plan. The initial expression of interest, master plan map and charrette illustration are included at Appendix 5.

Key Issues for the Management Plan to Address

The following issues have been identified through the consultations undertaken in the preparation of this plan and through assessment of the current situation on the Reserve.

Main issues:

- People appear to like the area and many visit the Reserve every day, weekly or at least monthly. Words used to describe the Reserve include: peace; quiet; open space; on the doorstep; views; wildlife. There is anecdotal evidence from recently submitted questionnaires that young people especially use the Reserve to seek refuge from troubled households.
- Lack of knowledge of what the Reserve area has to offer is still limiting peoples' use of it. It appears that many people, whilst happy to use the sports pitch and other more managed areas such as picnic sites, are somewhat afraid of the more natural / wild parts of the Reserve and lack the confidence to visit these.
- Improvements to paths continue to be requested by many – better surfaces in some places, and vegetation will always need to be cut back in season.
- There is a significant new demand for wildlife watching facilities.
- Whilst good seating is currently available, there is a demand for more.
- Dog fouling remains a major issue as does, significantly, the behaviour of poorly disciplined dogs.
- Litter is considered a problem to a lesser degree. There are offers from within the community, particularly pupils of Merkinch Primary School, to carry out regular litter picks.
- There is a strong demand for more Reserve events.
- There is a lack of knowledge of the extent to which the Reserve is used by organised groups.

Main improvements (sample of 118, of whom 96 are aware of the Reserve's existence)

- Wildlife viewing facilities - 48%
- More seating - 45%
- More events to take part in - 45%
- More/better paths – 43%
- Warden/ranger service - 40%
- Better signage - 29%

Other important issues relating to the management of the Reserve are as follows:

- The level of knowledge of the biological assets of the Reserve is growing, and there are now many records, but they are not currently being collated. There is currently little evidence of need to manage the biological assets of the Reserve other than to control invasive non-native plant species (the spread of Michaelmas daisy may have led to a decline in the population of the butterfly orchid), to carry out some small-scale woodland management and possibly to monitor the hydrological status of the site. There is some concern over the welfare of roe deer on the site, and following advice from Scottish Natural Heritage, a simple deer management plan has been drawn up. This can be found at Appendix 6.
- The Reserve has a history of curricular use by Merkinch (primary) School and Inverness High School. Merkinch School, supported by the “Wild Things” project, has been visiting the Reserve approximately four times a year. Inverness High School assisted Verity Walker with the Reserve interpretation plan in 2009, and their Rural Skills department made occasional use of the Reserve until 2012. More recently, Science staff have expressed interest in using the Reserve for biological fieldwork, but this has proved difficult to put into practice. They have, however, visited the site with the Scottish Waterways Trust in order to carry out field ecology sessions. Four teachers from Central, Dalneigh and St Joseph’s Primary schools took part in the Teaching in Nature projects, funded by Scottish Natural Heritage, so teachers and pupils from these schools had two visits each to the Reserve at the start of 2014. Muirtown Primary School has visited the Reserve with the Scottish Waterways Trust. Charleston Academy, whilst only slightly further away from the Reserve than Inverness High School, has not, as far as the author is aware, visited the Reserve to date. Management plan consultation questionnaires were completed by 18 pupils from Merkinch School and 12 pupils from Inverness High School.
- The Reserve remains subject to various anti-social behaviours. Merkinch Greenspace Directors deserve credit for addressing these to some extent, for example by overseeing the installment of posts along the sea wall to slow motorbike riders down, and, by their regular presence on the site, challenging visitors who, for example, drop litter. There is potential to increase the scope of litter picking on the Reserve and there is a need for improved dog control in particular.
- The Reserve remains little known outside the Merkinch community, but its status is increasingly being recognised through on-line fora and social media. More work is required for the Reserve to be recognised as a valuable resource for all residents of Inverness, and indeed for visitors to the City.
- The provision of the old ticket office as a focus for the environment and heritage remains under threat. Given the contaminated land issues on this site, there appears to be little potential to develop / enhance the facility at this location and it is unlikely that a new Reserve visitor centre would be feasible in the timescale of this plan.

- The reserve has the potential to provide the perfect environment for activities outlined in the Highland Single Outcome Agreement http://www.highland.gov.uk/downloads/file/4613/single_outcome_agreement_3 for example the Green Gym and other volunteering opportunities, which would result in a range of benefits for the local community.

5. Assessment - Criteria for Designation

This was adequately covered in the previous management plan

http://www.merkinchlnr.org.uk/pdf/Merkinch_LNR_Management_Plan_Final_March_2008.pdf

6. Aims and Objectives

The following outlines what is wanted out of the site, and what roles the site can fulfil.

Reserve Aims

These are overarching aims which the reserve must deliver on if it is to achieve its vision of being the best Local Nature Reserve in Scotland: a place where people and wildlife co-exist to each other's mutual benefit

1. To increase the health and well-being benefits to individuals and communities through active involvement with the reserve.
2. To celebrate the wildlife value of the reserve through the conservation and sustainable management of its habitats and species.
3. To maximise the learning opportunities afforded by the reserve, and to communicate the importance of wildlife to the local community, Inverness residents and visitors to the area.
4. To improve and upgrade access provision to and within the reserve.
5. To establish governance for the reserve that will sustain its management through innovative access to funding sources.
6. To deliver best practice management for a Reserve that will be an example for other reserves.

Reserve Objectives

The following are the objectives that will allow the delivery of the aims above:

Aim 1 To increase the benefits to individuals and communities through active involvement with the reserve.

Objectives

- a) Provide additional seating on seawall, overlooking "heron pool" and in "amphitheatre" near entrance to Westfield.
- b) Promote Reserve facilities to all local GP practices.
- c) Update Reserve walks leaflet to reflect any new paths and / facilities created.
- d) Liaise with The Highland Council on the continued maintenance of football pitches for all-year use.
- e) Train local people to act as volunteer Reserve rangers, guided walk leaders, providers of information, basic interpretative techniques, biological recording, species and habitat management.
- f) Organise a monthly work day on the Reserve as an opportunity for all local people to get involved.

- g) Involve Merkinch Primary School pupils in structured litter picking events.
- h) Promote the Reserve in the context of it's ease of access from Inverness on foot or bicycle.

Aim 2 To celebrate the wildlife value of the reserve through the conservation and sustainable management of its habitats and species

Objectives

- a) The Reserve maintains a detailed inventory of habitats and species.
- b) Attractive leaflets / other media are made available highlighting seasonal wildlife to Reserve visitors.
- c) The Reserve website is kept up-to-date with species records.
- d) The Reserve is a place where practical conservation work is promoted.
- e) Local volunteers take responsibility for the management of invasive non-native plant species.
- f) Local volunteers take responsibility for the management of dead wood, where required for the safety of visitors.
- g) The Reserve is a place where students and researchers provide valuable management support information and biological records.

Aim 3 To maximise the learning opportunities afforded by the Reserve, and to communicate the importance of wildlife to the local community, Inverness residents and visitors to the area

Objectives

- a) All interpretation delivered through an up-to-date interpretation plan.
- b) Information on the use of the Reserve by schools is collated.
- c) Provide programme of 7 events/year open to all.
- d) Establish a clear Welcome / entry point at the roundabout / entrance to Westfield.
- e) Construct bird-hides / sheltered seating at appropriate locations.
- f) Include Merkinch LNR in any wider publicity about Inverness.
- g) Work in partnership with the information centre in the ticket office.
- h) Build a log cabin within the "amphitheatre" area.
- i) Create managed opportunities for local children to build dens on the Reserve.
- j) Develop on-site and off-site information about the wrecks of the two boats near the mouth of the Caledonian Canal.

Aim 4 To improve and upgrade access provision to and within the Reserve.

Objectives

- a) Maintain existing routes to provide dry, firm surface, clear of vegetation and accessible to all.

- b) Continually replace any vandalised access furniture.
- c) Promote walking on the Reserve in line with the National Walking Strategy <http://www.scotland.gov.uk/Publications/2014/06/5743>
- d) Promote “cycling prescriptions” on Merkinch LNR in liaison with Fairfield Medical Practice and Velocity Café
- e) Promote the wider potential health benefits of the Reserve in partnership with the Community Health Co-ordinator.
- f) Create a new path along desire line through Westfield as identified in Muirtown and South Kessock Charrette, if found to be compatible with proposed new housing adjacent to the Reserve
- g) Create a circular path around Carnarc Point through the Space by the Water Project
- h) Provide ramp off Caledonian Canal linking to Reserve path network that is Disability Discrimination Act compliant and meets the requirements of Historic Scotland for the Scheduled Ancient Monument.
- i) Provide additional picnic benches in the “amphitheatre” area.
- j) Provide additional monolith signs outwith the Reserve boundary.
- k) Promote responsible use of the Reserve by dog walkers.

Aim 5 To establish governance for the reserve that will sustain its management through innovative access to funding sources

Objectives

- a) The Reserve has its own “Friends of Merkinch LNR” group that is responsible for the Reserve on behalf of local people, funders and partners.
- b) The Reserve extends to include Carnarc Point to ensure its long term management for local access and amenity.

Aim 6 To deliver best practice management for the Reserve that will be an example for other reserves

Objectives

- a) To maintain an up to date Health and Safety policy following risk assessment for visitors to the Reserve and undertake a site risk assessment twice yearly.
- b) The Reserve employs a range of locally based people, and works in partnership with a range of local groups, who are central to delivering the management plan.
- c) To monitor the number of visitors to the Reserve.
- d) The Merkinch LNR management group regularly reports back to the community on progress on the Reserve.
- e) The Reserve produces an Annual Report for the community, funders and partners

- f) The Management Plan is reported on every year and is reviewed every 3 years
- g) A “twinning” arrangement is agreed with the managers of Duchess Wood LNR in Helensburgh.
- h) The Friends undertake ‘Learning Visits’ to other LNRs and host visits from Duchess Wood LNR and other similar groups.
- i) “Recycling on the Go” bins are provided at the turning circle and canal entrances to the Reserve.
- j) The Reserve helps to deliver the outcomes identified within the Highland Single Outcome Agreement.

7. “Short list” of small projects that could quickly take place if small amounts of funding are available at short notice

- Purchase of two additional picnic benches for amphitheatre - £500 each plus £50 for delivery = £1,050
- Install additional dog waste bins
- Training of two local people to obtain herbicide application PA1 / PA6 certificates - £380 per person = £760
- Engage tree surgeon to reduce height of standing dead timber adjacent to paths - £500 per day
- Funding for open day / other Reserve events – amount dependent on programme content
- Purchase one or more brown signs for erection on Inverness roads. Cost to be advised by The Highland Council.
- Purchase materials for replacement of vandalised access furniture as required.
- Repair broken path edges and boardwalk planks as required.
- Purchase replacement people counters – cost to be determined under Objective 6 c below.
- Production of quarterly Reserve update in Merkinch News and Views – £25 per quarter.
- Funding for “learning visit” for Friends of Merkinch LNR to additional LNR and / or make repeat visit to Duchess Wood LNR. Travel and subsistence to and from midland belt approximately £250 for one day.
- Engage The Conservation Volunteers for additional days (over and above 12 days / year agreed commitment – subject to funding being in place) as required – £300 / day.

8. Methods

This section identifies the action to be taken, and the resources that will be needed to achieve each of the objectives listed above.

Aim 1 To increase the health and well-being benefits to individuals and communities through active involvement with the Reserve.

Objective 1 a - Provide additional seating on seawall, overlooking “heron pool” and in “amphitheatre” near entrance to Westfield.

Opportunities are currently provided for visitors to sit and enjoy the views and for relaxing and socialising. Questionnaire returns demonstrate that there is a demand for more seating. It is proposed that additional picnic benches be installed within the sheltered grassy area to the east of the northern start of the seawall, known as the “amphitheatre”. There was also a request during the community consultation for sheltered seating overlooking the “heron pool”. It is proposed that seating, combined with bird hides, be provided at locations on the seawall and adjacent to the “heron pool” as identified in the Charrette and in liaison with Friends of Merkinch LNR. More of a similar style of picnic bench to those currently in place can be obtained for £500 each plus delivery cost of approximately £50.

Measure 1: 2 additional benches in place in “amphitheatre” by end 2015.

Measure 2: 3 structures combining bird hides and sheltered seating to be installed along sea wall and adjacent to the “heron pool” by end 2016.

Methods: Decide on location, budget and design.

Resources: Friends of Merkinch LNR; funds realised through The Highland Council’s Space by the Water Project if application successful; potential funding from Landfill Communities Fund.

Objective 1 b - Promote Reserve facilities to all local GP practices.

The Reserve can act as a focus for encouraging short walks for those within the community who need encouragement to take more exercise. This should be promoted to all local medical practices. The Scottish Waterways Trust have been facilitating walks and other activities with mental health groups under two different projects. The current one is “Nature Walks for Wellbeing”. It is desirable that such activity should continue. The Highland Single Outcome Agreement identifies the need for environmental and physical outcomes as agreed with the Scottish Government (in addition to other outcomes). National and local interest in the reserve is therefore picking up and funding is more likely to be available by making these connections.

http://www.highland.gov.uk/downloads/file/4613/single_outcome_agreement_3

Measure 1: all GPs operating in the postcodes identified in the consultation questionnaires are aware of the recreational and health promoting opportunities of the Reserve.

Methods: Contact all GP practices operating in the postcodes identified in the consultation questionnaires. This work should be carried out in partnership with the Community Health Co-ordinator and within the network of health based community developers before widening the scope of “green prescriptions” with GP practices.

Resources: Friends of Merkinch LNR; NHS Community Health Co-ordinator; Health centre staff; Rotary Club walks leaflet; Scottish Waterways Trust.

Objective 1 c - Update Reserve walks leaflet to reflect any new paths and / or facilities created

The opportunities available within the Reserve for access and enjoyment remain little known outside the immediate community. The Friends of Merkinch LNR should liaise with the Rotary Club Inverness Culloden to update the existing leaflet to take account of any new paths and / or other Reserve facilities. It is suggested that this work be carried out in liaison with The Highland Council's Ranger Service. There is also an opportunity here to engage the services of the Community Health Co-ordinator in order to consider innovative ways of promoting local peoples' health through the leaflet.

Measure 1: Leaflet updated by March 2017 assuming successful outcome of Space by the Water Project.

Methods: Friends of Merkinch LNR to approach Rotary Club Inverness Culloden to request updated leaflet at appropriate time – late 2016.

Resources: Friends of Merkinch LNR; Rotary Club Inverness Culloden; The Highland Council's Ranger Service; Community Health Co-ordinator (South and Mid Operational Unit).

Objective 1 d - Liaise with The Highland Council on the continued maintenance of football pitches for all-year use

The football and rugby pitches are popular local recreational assets and they should be protected and maintained to their current standard. There was also a request during the consultation for secure storage on-site facilities for sports equipment.

Measure 1: Continue to maintain as required.

Measure 2: The feasibility of installing secure on-site equipment storage is investigated.

Methods: Grass cutting, line marking etc within current maintenance

Schedule. Friends of Merkinch LNR investigate feasibility of providing secure on-site equipment storage.

Resources: Private contractor to The Highland Council TEC Services; Friends of Merkinch LNR; funding from e.g. BIFFAward small grants scheme.

Objective 1 e - Train local people to act as volunteer Reserve rangers, guided walk leaders,

providers of information, basic interpretative techniques, biological recording, species and habitat management.

Personal contact with local people can be an important promotional tool for the Reserve. The active involvement of local volunteers to provide this service for local visitors, groups and outside visitors should be encouraged. This should ensure quality in terms of information, knowledge and delivery and should be developed through taking access to appropriate short courses for interested local volunteers. Forty percent of questionnaire returns identified staff presence on the Reserve as being important. This worthy objective was identified in the initial 2008 management plan, but has not been realised owing to the shortage of time available on the part of the Reserve Management Group and Greenspace Directors. In order for this objective to be achieved, it is likely to be necessary to seek funding for a development officer to identify, motivate and train appropriate local people. There is a wide variety of tasks expected of such volunteers, and it would be best if these were split, according to the interests of individuals concerned, into three main areas: education / information / interpretation; biological recording; and practical management such as use of herbicides and scrub cutting.

Measure 1: Two members of local community are trained to carry out species and habitat management, and are in place by summer 2015.

Methods: Friends of Merkinch LNR apply for short-term funding to train two local people for qualification in herbicide application. Two current members of The Conservation Volunteers Green Gym Project live in Merkinch and may be suitable candidates for this work. The Scottish Waterways Trust have a new project starting in 2015, called the "Canal College". This will train young adults in various outdoor skills over a 12 week period. This project is based at Muirtown Basin and has good potential for involvement in the management of the Reserve.

Resources: Friends of Merkinch LNR; The Conservation Volunteers; Scottish Waterways Trust "Canal College"; BIFFA Award; The Rank Foundation; Young Start (Big Lottery Fund Scotland); Landfill Communities Fund.

Measure 2: A Merkinch Local Ranger Development Officer is appointed by end 2015.

Methods: Friends of Merkinch LNR apply for funding for local ranger development officer for 3 years. Appointed officer identifies, motivates and arranges training for suitable local people to the required standard, seeking additional funding where necessary. Cost approximately £25,000 annually plus 10% on-costs = £82,500 over three years. This assumes that a full-time post would be created for Merkinch LNR. It would be possible, however, to establish a part-time post, possibly in combination with other Inverness city projects.

Resources: Friends of Merkinch LNR; Merkinch Enterprise; For the Right Reasons project; Climate Challenge Fund; Volunteering Support Fund; Young Roots – Heritage Lottery Fund; Scottish Government Community Funds Gateway; Scottish Natural Heritage; Santander Community Plus; Landfill Communities Fund.

Measure 3: Two members of local community are trained to carry out biological recording, and are in place by spring 2017.

Methods: Volunteers shadow The Highland Council's Biodiversity Officer, Highland Biological Recording Group, Botanical Society of the British Isles Vice-County Recorder, relevant department(s) of University of the Highlands and Islands (Inverness Campus) under overall management of Merkinch Local Ranger Development Officer.

Resources: Merkinch Enterprise; Training providers; The Highland Council's Biodiversity Officer; Highland Biological Recording Group; Botanical Society of the British Isles Vice-County Recorder; BIFFA Award; The Rank Foundation; Young Start (Big Lottery Fund Scotland); Landfill Communities Fund.

Measure 4: Two members of local community are trained to carry out education / information / interpretation, effectively operating as voluntary Reserve rangers, and are in place by spring 2017.

Methods: Volunteers shadow Dell McClurg, The Highland Council Ranger Service, Scottish Canals project officers under overall management of Merkinch Local Ranger Development Officer.

Resources: Merkinch Enterprise; Training providers; Countryside Rangers; Scottish Canals staff; BIFFA Award; The Rank Foundation; Young Start (Big Lottery Fund Scotland); Landfill Communities Fund.

Objective 1 f - Organise a monthly work day on the Reserve as an opportunity for all local people to get involved

Merkinch Greenspace Directors currently carry out a significant portion of the practical work on the Reserve and have also adopted an informal policing role. They need help with this, however, and the most productive means of getting this help would be the involvement of more local people in running the Reserve. One way of achieving this would be through a regular monthly work day.

Measure 1: A monthly work day is established on the Reserve by summer 2015.

Methods: In the short term, this could possibly be integrated with The Conservation Volunteers' Green Gym project, but in the long term might best be delivered through the Reserve volunteer Ranger service. There is potential for deployment of the For the Right Reasons Project here too.

Resources: Friends of Merkinch LNR; The Conservation Volunteers' Green Gym project; For the Right Reasons project; sufficient tools for the work required (these may be available through The Conservation Volunteers' pool, or a company such as B & Q Inverness could be approached with a request to donate tools).

Objective 1 g - Involve Merkinch Primary School pupils in structured litter picking events

Pupils of Merkinch School have, through their returned questionnaires, expressed their enthusiasm for getting involved in litter picking on the Reserve. This presents an excellent opportunity for them to get more involved with the Reserve and at the same time, help with its management.

Measure 1: Merkinch School pupils visit the Reserve quarterly for the purpose of litter picking from summer 2015.

Methods: This activity is best combined with curriculum activities on the Reserve, which should be easy as the school has a track record of effective use of the Reserve for learning. The Scottish Waterways Trust worked with P4 pupils at the school in 2013 to obtain their John Muir Awards. The John Muir Award is a good certificated framework for building such a project. There is potential for help with supervision from the Ross-shire Waste Action Network.

Resources: Merkinch School; John Muir Award; Ross-shire Waste Action Network; litter pickers; gloves; litter bags.

Objective 1 h - Promote the Reserve in the context of its ease of access from Inverness on foot or bicycle

Encouraging those outside the local community to take access to the Reserve will help locals to feel proud of it, will increase their self-esteem and can potentially reduce the stigma associated with the Merkinch / South Kessock area. It therefore has indirect benefits for the local community.

Measure 1: Signs in the city centre direct cyclists and walkers to the Reserve.

Measure 2: Signs at other nearby attractions such as the Caledonian Canal, the Great Glen Way and Carnarc Point direct cyclists and walkers to the Reserve.

Methods: There is an excellent opportunity here for joint working through the Space by the Water Project. Friends of Merkinch LNR and the Reserve management group should work with the Highland Council and Scottish Canals to plan and co-ordinate appropriate signage.

Resources: Friends of Merkinch LNR; The Highland Council's Access Officer for Inverness; Space by the Water Project.

Aim 2 To celebrate the wildlife value of the Reserve through the conservation and sustainable management of its habitats and species

Objective 2 a - The Reserve maintains a detailed inventory of habitats and species

Whilst habitat and species information from the Reserve is gathered and shared informally at present, for example on occasional BioBlitz events and on the Reserve's Facebook page, no-one currently has time to maintain a systematic record. It is suggested that this work would best be carried out by the local biological recording volunteers as described in Objective 1 g.

Measure 1: Two members of local community are trained to carry out biological recording, and are in place by spring 2017.

Measure 2: All wildlife records are collated in liaison with the Highland Biological Records Centre.

Methods: Volunteers shadow The Highland Council's Biodiversity Officer, Highland Biological Recording Group, Botanical Society of the British Isles Vice-County Recorder, relevant department(s) of University of the Highlands and Highlands (Inverness Campus) under overall

management of Merkinch Local Ranger Development Officer. The Scottish Waterways Trust were involved in BioBlitz events on the Merkinch foreshore in 2014, and are happy to continue to provide teaching resources in partnership with other organisations. All records are passed to the Highland Biological Records Centre.

Resources: Merkinch Enterprise; Training providers; The Highland Council's Biodiversity Officer; Scottish Waterways Trust; Highland Biological Recording Group; Botanical Society of the British Isles Vice-County Recorder; BIFFA Award; The Rank Foundation; Young Start (Big Lottery Fund Scotland); Landfill Communities Fund.

Objective 2 b - Attractive leaflets / other media are made available highlighting seasonal wildlife to Reserve visitors

This objective has been developed following Merkinch Greenspace Directors' visit to Duchess Wood LNR where similar leaflets are in place. These serve to make Reserve visitors aware of the various types of wildlife that inhabit the Reserve, and also encourage informed amateurs with specialised interests to identify gaps and to attempt to update them with their own data contributions. The suggested approach here is to start with easy, well-recorded groups and to progress to the more difficult, under-recorded groups as manpower becomes available through the acquired skills of the biological recording volunteers. Use could be made of QR codes on small plastic plaques, fixed to existing benches and street furniture, and linking to an on-line leaflet.

Measure 1: A bird leaflet is in place, printed and on-line, by end 2015.

Measure 2: Flowering plant and mammal leaflets are in place, printed and on-line, by end 2016.

Measure 3: A sea shore animal leaflet is in place, printed and on-line, by end 2017.

Measure 4: Tree / shrub and fungi leaflets are in place, printed and on-line, by end 2018.

Methods: Collect data in liaison with relevant recording groups and individuals, design leaflets, print and place on Reserve website.

Resources: Friends of Merkinch LNR; local bird recorders; Highland Biological Recording Group; Merkinch Enterprise; funding from, for example, Heritage Lottery – Sharing Heritage Fund, Landfill Communities Fund.

Objective 2 c - The Reserve website is kept up-to-date with species records

This objective would widen the scope to inform people of what is special about the Reserve, and the work may best be carried out once the biological recording volunteers are in place. Highland Biological Recording Group may be able to provide specialist help.

Measure 1: The website is updated with species records at least monthly.

Resources: Friends of Merkinch LNR; The Highland Council's Biodiversity Officer; The Highland Council's Ranger Service; Highland Biological Recording Group.

Objective 2 d - The Reserve is a place where practical conservation work is promoted

Since its declaration in 2007, Merkinch LNR has established a good working relationship with The Conservation Volunteers' Green Gym project, who have carried out much practical improvement and maintenance work on the Reserve. Some of the participants of the Green Gym project have come from Merkinch, but further work is required to strengthen the links between Friends of Merkinch LNR, The Conservation Volunteers and local people. Use can be made of networking groups within Merkinch and South Kessock in order to promote locally the health benefits of participation in practical conservation work on the Reserve.

Some of the work within this objective is also addressed in Objective 1 f above.

Measure 1: The working relationship with The Conservation Volunteers is re-established and practical work resumes on the Reserve on the part of the Green Gym project by spring 2015.

Measure 2: Two members of local community are trained to carry out species and habitat management, and are in place by summer 2015.

Methods: Friends of Merkinch LNR re-establish contact with The Conservation Volunteers and explore areas of mutual benefit. RSPB have also indicated their interest in helping with practical conservation projects on the Reserve, and Friends of Merkinch LNR should contact them to establish what they are interested in doing on the site. Friends of Merkinch LNR apply for short-term funding to train two local people for qualification in herbicide application.

Resources: Friends of Merkinch LNR; The Conservation Volunteers; RSPB; Merkinch and South Kessock Network; Community Health Co-ordinator; BIFFA Award; The Rank Foundation; Young Start (Big Lottery Fund Scotland); Landfill Communities Fund.

Objective 2 e - Local volunteers take responsibility for the management of invasive non-native plant species

The existing Reserve management group have identified some threats to the site from invasive non-native species. The main problem species are michaelmas daisy, snowberry and Japanese knotweed. Members of the group currently carry out control measures, considerable assistance is available from the Green Gym project, and RSPB have helped with the control of snowberry. The Lower Ness Invasive Species Group are undertaking the removal of Japanese knotweed in the wider area, and this is likely to continue for the lifetime of this plan. There is a need for more local people to assist the current volunteers by helping to identify and control invasive non-native plants.

Measure 1: Two members of local community are trained to carry out species and habitat management, and are in place by summer 2015.

Measure 2: All invasive non-native species populations are decreasing by end 2015.

Measure 3: The Reserve Facebook page is used by visitors to alert Friends of Merkinch LNR to new populations of invasive non-native species.

Methods: Friends of Merkinch LNR apply for short-term funding to train two local people for qualification in herbicide application. Current cost for PA1 / PA6 certificates £380 / person.

Friends of Merkinch LNR report sightings of invasive non-native species and carry out control

measures using appropriate methods at the appropriate season. Research is undertaken into alternative methods of control for Michaelmas daisy, including grazing if compatible with public access needs.

Resources: Friends of Merkinch LNR; The Conservation Volunteers; Reserve Facebook page; BIFFA Award; The Rank Foundation; Young Start (Big Lottery Fund Scotland); Landfill Communities Fund.

Objective 2 f - Local volunteers take responsibility for the management of dead wood, where required for the safety of visitors

There is a perception amongst some Reserve visitors that the woodland within the site is “untidy”, largely owing to the shallow soil that gives rise to a significant proportion of wind-thrown timber. Merkinch Greenspace Directors are now aware, however, through the training provided as part of the management planning process, of the benefits of standing and lying dead wood for the habitat. As well as the frequently cited value for insect habitat, associated bird life and provision of sites for growth of fungi, the fallen stems provide refuges for deer, allowing them to escape pursuit by stray dogs, and also impede human access off the paths that allows part of the Reserve to act as a wildlife refuge without the need for additional management. Directors have, however, identified the need to remove standing dead timber that is close to paths in the interests of visitor safety. This does not necessarily mean total felling of the tree concerned: by careful use of topping, reduced standing stems can be left adjacent to paths provided they are at least the distance of their height away from these paths. Funding may be available from the Woodlands In and Around Towns scheme <http://scotland.forestry.gov.uk/supporting/strategy-policy-guidance/communities/woods-in-and-around-towns-wiat> that is operated by Forestry Commission Scotland, once the Scotland Rural Development Programme funding gap has passed.

Measure 1: All standing dead wood adjacent to paths made safe by summer 2015.

Measure 2: Two members of the local community are trained to carry out woodland management, and are in place by autumn 2015.

Methods: Standing dead wood can be felled by trained members of the local community and / or The Conservation Volunteers Green Gym participants. Topping of dead trees is likely to require the specialist services of a tree surgeon. Likely cost £500 / day including machinery hire.

Resources: Friends of Merkinch LNR; The Conservation Volunteers Green Gym project; local tree surgeon; training providers; funding from Woodlands In and Around Towns project.

Objective 2 g - The Reserve is a place where students and researchers provide valuable management support information and biological records

With the growth of the University of the Highlands and Islands and the development of the new Inverness College campus, there is an opportunity for students to carry out research, for example as part of the Higher in Managing Environmental Resources, that could be of mutual benefit. This work will raise the profile of the Reserve and will greatly assist in the future management

of the conservation interests, for example by developing a regime of hydrological monitoring.

Measure 1: Develop formal link with Inverness College, agree and maintain list of potential student projects at HE and FE levels.

Methods: The Highland Council's Biodiversity Officer and Friends of Merkinch LNR liaise with relevant College staff and students.

Resources: Partners' time

Aim 3 To maximise the learning opportunities afforded by the Reserve, and to communicate the importance of the wildlife to the local community, Inverness residents and visitors to the area

Objective 3 a - All interpretation delivered through an up-to-date interpretation plan

Measure 1: All interpretation on or about the Reserve uses the themes identified within the Reserve Interpretive Plan http://www.merkinchlnr.org.uk/pdf/Merkinch_LNR_Interpretive_Plan.pdf

Methods: Maintain up-to-date Interpretation Plan that takes account of increased understanding of the Reserve developed during the implementation of this management plan.

Resources: Friends of Merkinch LNR, The Highland Council.

Objective 3 b - Information on the use of the Reserve by schools is collated.

There is a shortage of information on the extent to which the Reserve is used by local schools. Anecdotal evidence was obtained during the writing of this plan, but a systematic record would be helpful.

Measure 1: Groups e-mail the Reserve website when visiting the site.

Measure 2: Groups contact the volunteer Ranger when visiting the site.

Objective 3 c - Provide programme of 7 events each year, open to all

Since the Reserve was declared in 2007, a number of events have been run on the Reserve, but their frequency has varied from year to year, dependent on the availability of people to organise them. The results of the recent public consultation have shown that 45% of questionnaire respondents would like more events to be held on the Reserve, yet this presents a challenge in that attendance at recently offered events has been poor. The Highland Council's Ranger Service have been the most prolific to date, holding a number of Ranger-led walks that were open to the public. Following a training exercise for Merkinch Greenspace Directors that formed part of the recent consultation, a quarterly programme of early evening visits to the Reserve has been agreed, with the expectation that these will be attended by the Directors and also open to any interested local people. There has also been some sort of "open day" or "fun day" run on the Reserve in most years since declaration, sometimes focussing closely on what the Reserve has to offer, and occasionally less so. There will be a role for the voluntary Reserve rangers in contributing to and / or providing an annual programme of events in future. It is also possible that RSPB would be

interested in contributing to the events programme, and Friends of Merkinch LNR should contact them to find out.

Measure 1: 4 quarterly early evening walks around the Reserve are held during 2015.

Measure 2: A Reserve Open Day, celebrating what is special about the Reserve, is held in each of the years 2015 – 2018.

Measure 3: Two additional specialist events, such as “BioBlitz” days, are held in each of the years 2015 – 2018.

Resources: Friends of Merkinch LNR; The Highland Council’s Ranger Service and Biodiversity Officer; Highland Biological Recording Group; RSPB; Further education institutes; Local artists / musicians; Scottish Waterways Trust.

Objective 3 d - Establish a clear Welcome / entry point at the roundabout / entrance to Westfield

The current sense of arrival at the Reserve remains very low key. This has been enhanced by the installation of the Reserve markers, but a greater sense of arrival is still required. It is proposed that a new entrance is created at the north end of the Reserve, to the right of the existing gate and away from the houses. This would lead into the north end of the Westfield. The potential to locate an art feature in the roundabout that would be representative of the Reserve should be explored. This could be delivered through a competition and there is high potential for work in partnership with the Space by the Water Project here. Before any action is taken on new installations ALL redundant old features should be removed. These offer a sense of dereliction and indicate past problems.

Measure 1: Welcome point established by March 2016

Methods: Install additional group seating in “amphitheatre”; sign and / or art installation on turning circle roundabout; remove old signs.

Resources: Friends of Merkinch LNR; The Highland Council through Space by the Water Project; picnic benches from Iain Chalmers; The Conservation Volunteers Green Gym project.

Objective 3 e - Construct bird-hides / sheltered seating at appropriate locations

The addition of wildlife watching facilities was the most desired new Reserve facility identified within the consultation questionnaire, with 48% of respondents requesting them. This is consistent with the findings of the Muirtown and South Kessock Charrette, where a need was expressed for hides and / or sheltered seating at a number of locations along the sea wall.

Measure 1: 2 additional benches in place in “amphitheatre” by end 2015. Cost £1,050.

Measure 2: 3 structures combining bird hides and sheltered seating to be installed along sea wall by end 2016.

Methods: Decide on location, budget and design.

Resources: Friends of Merkinch LNR; funds realised through The Highland Council's Space by the Water Project if application successful; potential funding from Landfill Communities Fund.

Objective 3 f - Include Merkinch LNR in any wider publicity about Inverness

The amount of information about Merkinch LNR available to residents of other parts of Inverness and further afield is improving (see Current Usage section above), but is in need of further enhancement. The Reserve can be more of an asset to the City if it is better known.

Measure 1: VisitScotland "brown signs" publicising the Reserve are in place at agreed locations within Inverness by end 2016.

Methods: Liaison with The Highland Council and BEAR Scotland. These organisations would be able to advise on costs.

Resources: Friends of Merkinch LNR; Merkinch Enterprise; The Highland Council; BEAR Scotland; VisitScotland.

Objective 3 g - Work in partnership with the information centre in the ticket office

As identified in the initial management plan, the information centre based at the old ticket office remains under threat. It is now possible that The Highland Council will sell the building and associated land to the Whale and Dolphin Conservation Centre, and in the light of this it is important that Friends of Merkinch LNR work with Dell McLurg, who runs the facility as a long-standing volunteer, to secure the best possible outcome for Merkinch LNR.

Objective 3 h - Build a log cabin within the "amphitheatre" area

There is local support for the installation of a log cabin to act as a sheltered meeting point on the Reserve. The "amphitheatre" area is free of major flood risk constraints and is also within an area where appropriate development is possible. Friends of Merkinch LNR should investigate the cost of installation of a log cabin and then commission it. It would undoubtedly enhance the Reserve with its access to the sea front and outstanding views to the west and north to Ben Wyvis. If such a development were to go forward it must respect the location and be designed to the highest environmental standards.

Measure 1: Log cabin constructed by end 2016.

Methods: Friends of Merkinch LNR to price and oversee building of a log cabin.

Resources: Friends of Merkinch LNR; Merkinch Enterprise; funding from, for example, BIFFAward / Space by the Water Project; Landfill Communities Fund.

Objective 3 i - Create managed opportunities for local children to build dens on the Reserve

There is currently an issue with local children bringing disused furniture and other items onto the Reserve to make dens. Whilst the activity itself is not regarded as a problem by Merkinch Greenspace Directors, the items brought in effectively become litter. It has been suggested that advice be sought from local advocates of the Forest School movement to create structured

opportunities for children to build dens on the Reserve using natural, biodegradable materials. There is, for example, plenty of willow on site.

Measure 1: All future dens built on the Reserve are of natural material.

Methods: Seek advice / formal training from local Forest School activists such as Abriachan Community Woodland. The volunteer Rangers (see objective 1 f above) could be trained in Forest School skills, then deliver supervised den building events for local children.

Resources: Friends of Merkinch LNR; local Forest School practitioners; Merkinch volunteer Rangers; willow and other natural and harvestable material from the Reserve.

Objective 3 j - Develop on-site and off-site information about the wrecks of the two boats near the mouth of the Caledonian Canal

This is a project that would be delivered in partnership with Scottish Canals, and would make an excellent subject for the Space by the Water Project, assuming a successful outcome.

Measure 1: On-site and off-site information in place by end 2016.

Methods: Friends of Merkinch LNR work in partnership with Scottish Canals and Space by the Water project to deliver information both on site and on-line.

Resources: Friends of Merkinch LNR; Merkinch LNR management group; Scottish Canals; Space by the Water Project.

Aim 4 To improve and upgrade access provision to and within the Reserve

Objective 4 a - Maintain existing routes to provide dry, firm surface, clear of vegetation and accessible to all

This work can be achieved through a combination of the work of Friends of Merkinch LNR volunteers, the For the Right Reasons Project <http://www.fortherrightreasons.net/about%20us.htm> and participants in The Conservation Volunteers' Green Gym Project, who can commit to having a team on the Reserve approximately once a month, subject to suitable funding being available. The wire netting on the surface of the boardwalk is coming to the end of its useful life, and improvements may be required to the structure of the boardwalk itself. Estimated 4 days a year from The Conservation Volunteers' Midweek Conservation Team at £300 / day.

Measure 1: Paths are maintained at a working width of 2.1 metres (for mixed use) and with smooth and dry surfaces.

Methods: maintain / upgrade path network as required using volunteer labour as above.

Resources: Friends of Merkinch LNR; For the Right Reasons Project; TCV Midweek Conservation Team; "Canal College" Project for canal end of Reserve; deprived areas funding; materials for paths / boardwalk.

Objective 4 b - Continually replace any vandalised access furniture

Merkinch LNR management group, working in partnership with The Conservation Volunteers' Green Gym project, have a good record of quickly replacing and / or repairing any damaged access furniture on the Reserve. There is evidence that this approach has paid off, as occurrences of vandalism are decreasing in frequency. It is suggested that this approach be maintained. Estimated 3 days a year from TCV Midweek Conservation Team at £300 / day.

Measure 1: Vandalised access furniture is repaired within 1 month of the occurrence.

Resources: Friends of Merkinch LNR; The Conservation Volunteers; materials for replacement / repairs.

Objective 4 c - Promote walking on the Reserve in line with the National Walking Strategy

<http://www.scotland.gov.uk/Publications/2014/06/5743>

The National Walking Strategy is a Scottish Government initiative and is being promoted by Scottish Natural Heritage. It is desirable that the Merkinch LNR management group becomes acquainted with this strategy and promotes walking on the Reserve in line with its recommendations.

Measure 1: Merkinch LNR management group members make themselves familiar with the strategy by end 2015 and follow its recommendations in order to promote walking on the Reserve.

Resources: Merkinch LNR management group; Reserve walks leaflet; Scottish Natural Heritage; The Highland Council's Access Officer for Inverness

Objective 4 d - Promote "cycling prescriptions" on Merkinch LNR in liaison with Fairfield Medical Practice and Velocity Café

Some attempt has been made through the Merkinch local network group to encourage the catchment medical practice to promote healthy activities through prescriptions as an alternative to medicines. The Velocity Café in Inverness, a business run by cyclists, is currently working with the Fairfield practice on cycling prescriptions, and there may be potential for Friends of Merkinch LNR to link up with Velocity by promoting the cycling opportunities on the Reserve.

Measure 1: Cycling prescriptions are offered from Fairfield Medical Practice by end 2016.

Resources: Friends of Merkinch LNR; Merkinch local network group; Velocity Café; Fairfield Medical Practice

Objective 4 e - Promote the wider potential health benefits of the Reserve in partnership with the Community Health Co-ordinator

There is potential for promotion of the health benefits of visiting the Reserve amongst a variety of client groups, and there could also be a social aspect in that the Reserve could serve to reduce the stigma of Merkinch with other areas of Inverness. Aonach Mòr, an outreach project from New Craigs Hospital, has occupational therapists who are already working with the Scottish Waterways Trust, and this work could potentially extend to Merkinch LNR.

Methods: Work with the NHS Community Health Co-ordinator and the Merkinch and South Kessock Network to promote opportunities as they arise.

Resources: Friends of Merkinch LNR; NHS Community Health Co-ordinator; Scottish Canals; Scottish Waterways Trust; Aonach Mòr project; Merkinch and South Kessock Network.

Objective 4 f - Create new path along desire line through Westfield as identified in Muirtown and South Kessock Charrette, if found to be compatible with proposed new housing adjacent to the Reserve

This work has been suggested following the Muirtown and South Kessock Charrette and has been included in the proposed Space by the Water Project, but will require negotiation with Friends of Merkinch LNR as to its desirability. It is suggested that should a new route be agreed, a specification, price and funding for this path be secured through the Space by the Water Project, assuming a successful outcome for the funding bid.

Measure 1: Path in place, if agreed, and built to required standards, by end 2016.

Resources: Friends of Merkinch LNR; Space by the Water Project; The Highland Council's Inverness Access Officer.

Objective 4 g - Create a circular path around Carnarc Point through the Space by the Water Project

This objective has been identified through the Muirtown and South Kessock Charrette and has the full support of the current Merkinch Greenspace Directors. It would widen the scope of the Reserve without necessarily requiring an agreement over the remaining foreshore between the ferry and Carnarc Point that currently lies outwith the Reserve boundary.

Measure 1: A circular path is in place around Carnarc Point by end 2017.

Resources: Friends of Merkinch LNR; Merkinch LNR management group; Space by the Water Project; The Highland Council's Access Officer for Inverness.

Objective 4 h - Provide ramp off Caledonian Canal linking to Reserve path network that is Disability Discrimination Act compliant and meets the requirements of Historic Scotland for the Scheduled Ancient Monument

This objective is self-explanatory and would improve access to the Reserve at the western end. It is a major project that requires partnership working with Scottish Canals and Historic Scotland, and would best be addressed through the Space by the Water Project. Assuming a successful outcome for this bid, costings would need to be worked up as part of that project.

Measure 1: A ramp is in place by end 2018.

Methods: Install improved access at western end of Reserve according to methods determined through the Space by the Water Project.

Resources: Friends of Merkinch LNR; Merkinch LNR Management Group; Scottish Canals; Scottish Waterways Trust (working through “Canal College” Project); Historic Scotland; The Highland Council through the Space by the Water Project.

Objective 4 i - Provide additional picnic benches in the “amphitheatre” area

Forty five percent of questionnaire respondents expressed a desire for more seating on the Reserve. In the short term, this is best addressed by the addition of two picnic benches in the “amphitheatre”, of a similar design to those currently in place.

Measure 1: 2 additional picnic benches are in place by end 2015.

Methods: Commission Iain Chalmers to make two additional benches at a cost of £500 each plus approximately £50 for transport.

Resources: Friends of Merkinch LNR; Iain Chalmers; possible funding through BIFFAward small community grant; Landfill Communities Fund.

Objective 4 j - Provide additional monolith signs outwith the Reserve boundary

Merkinch Greenspace Directors are keen to see additional Reserve signs outwith the site, and this desire fits with the remit of the Space by the Water Project to strengthen links between the attractions of the Caledonian Canal, Great Glen Way and Merkinch LNR. The new signs should reflect twinning arrangements with Duchess Wood LNR, should these be agreed.

Measure 1: Additional monolith signs in place by end 2017.

Methods: Agree sites for additional monoliths if and when funding is approved for the Space by the Water Project. Costs to be investigated once this process is underway.

Resources: Merkinch LNR Management Group; The Highland Council’s Access Officer; Space by the Water Project.

Objective 4 k - Promote responsible use of the Reserve by dog walkers

The use of the Reserve for dog walking, whilst popular, is also highly controversial. Dog fouling remains one of the strongest negative issues for Reserve visitors, and there have also been incidents of frightening of other human visitors and disturbance of and / or attacking wildlife. This is to a certain extent a matter of education, but would also be more effectively managed with a greater patrolling presence from Dog Wardens and / or volunteer Rangers. In addition, a strong desire for more dog waste bins was demonstrated during the community consultations.

Measure 1: Three additional dog waste bins are in place, in locations agreed by Friends of Merkinch LNR, by end 2015.

Measure 2: Friends of Merkinch LNR approach The Highland Council to request increased Dog Warden presence on the Reserve by summer 2015.

Measure 3: Volunteer Rangers police dog use once they are in place (see Objective 1 f above).

Methods: Funding sought for additional dog waste bins which are then installed by local volunteers and / or The Conservation Volunteers' Green Gym project. Dog Warden and / or volunteer Rangers patrol the Reserve and challenge irresponsible dog ownership.

Resources: Friends of Merkinch LNR; The Conservation Volunteers' Green Gym project; The Highland Council's Dog Warden; volunteer Rangers; funding from e.g. BIFFAward small grants; Landfill Communities Fund.

Aim 5 To establish governance for the reserve that will sustain its management through innovative access to funding sources

Objective 5 a - The Reserve has its own "Friends of Merkinch LNR" group that is responsible for the Reserve to local people, funders and partners

This objective reflects an aspiration of Merkinch Greenspace Directors following their training visit to Duchess Wood LNR in August 2014. Their wish is to simplify the current governance of the Reserve and also to create an opportunity to raise funds for the Reserve through subscriptions. Under this arrangement, Merkinch Greenspace Directors, Merkinch LNR management group members, members and volunteers would all come under the same heading. It is felt that subscriptions should be paid on a donation basis.

Measure 1: The Friends of Merkinch LNR are formally constituted by end March 2015.

Measure 2: Fifty members are recruited to Friends of Merkinch LNR by end 2015.

Measure 3: Two hundred members are recruited to Friends of Merkinch LNR by end 2018.

Resources: Merkinch LNR management group; Friends of Merkinch LNR; Merkinch Enterprise.

Objective 5 b - The Reserve extends to include Carnarc Point to ensure its long term management for local access and amenity

The Reserve boundary currently extends to a line approximately half way between the old ferry terminal and Carnarc Point. The remaining land belongs to Inverness Harbour Trust and Friends of Merkinch LNR should continue to negotiate with them as to the inclusion of Carnarc Point within the Reserve.

Aim 6 To deliver best practice management for the Reserve that will be an example for other reserves

Objective 6 a - To maintain an up to date Health and Safety policy following risk assessment for visitors to the Reserve and undertake a site risk assessment twice yearly

The Reserve contains features that present a risk to the visitor. As the area is specifically promoted for public access and enjoyment, it is essential that the Management Group continues to address the Health and Safety needs of visitors. They must maintain a Health and Safety policy appropriate for the Reserve.

Measure 1: Health and Safety Policy in place and implemented.

Methods: Twice yearly inspection and review of risk assessment by management group.

Resources: Advice from The Highland Council and Scottish Canals.

Objective 6 b - The Reserve employs a range of locally based people, and works in partnership with a range of local groups, who are central to delivering the management plan.

The measures, methods and resources required are as in objectives 1 f, 2 d, 2 e, 2 f above.

Objective 6 c - To monitor the number of visitors to the Reserve

Since the Reserve was declared in 2007, considerable effort has been made on the part of The Highland Council's Ranger Service to deploy and monitor people counters at three stations on the site. Unfortunately, although accurate data were obtained in 2009, the counters appear to have become clogged with soil and other debris, and the succeeding years' data cannot be considered accurate. The Ranger Service is currently looking into replacement of the counters with more robust alternatives. It is highly desirable that accurate annual data are obtained in order to plan for the Reserve and to justify funding applied for.

Measure 1: Accurate counts of the number of passes are obtained at all three stations in each of the years 2015 – 2018.

Methods: Costs of replacing the current people counters are obtained. Monthly checking of people counters and maintenance of spreadsheet record.

Resources: The Highland Council's Ranger Service; three replacement people counters.

Objective 6 d - The Merkinch LNR management group regularly reports back to the community on progress on the Reserve

It is critical that the local community is kept up to date with progress on the Reserve and are advised of any interesting developments. To do this, it is recommended that a quarterly page is included in Merkinch News and Views, and that the Merkinch LNR website is updated with additional information about the Reserve – particularly minutes of management group meetings and documents arising from Reserve plans and projects. Wildlife sightings are currently well shared through the Reserve's Facebook page.

Measure 1: Community feel informed and engaged with work on Reserve

Measure 2: Quarterly Reserve update included in Merkinch News and Views

Methods: Maintain up-to-date website, Facebook page and newsletter

Resources: Friends of Merkinch LNR; Merkinch Enterprise; Merkinch News and Views; The Highland Council's Biodiversity Officer; The Highland Council's Ranger Service. £100 per year.

Objective 6 e - The Reserve produces an Annual Report for the community, funders and Partners

An Annual Report should be produced each year to record the past year on the Reserve. This should record all significant activity on the Reserve and should be published on the website as well as being provided for all interested parties.

Measure 1: Annual Report produced, with limited circulation but published on LNR website.

Methods: Overseen by management group, but contracted out.

Resources: £1400 per year.

Objective 6 f - The Management Plan is reported on every year and is reviewed every 3 years

Progress towards meeting the objectives of this Plan should be recorded and reported back on annually within the Annual Report. The Management Plan should be subject to a critical review in Year 3 and should be updated for the next 3 year cycle

Measure 1: Plan evaluated / updated annually major review Year 3

Methods: Management group assess progress against targets and action plan and amend forward plan accordingly. Agree approach to review with key funders and partners.

Resources: LNR management group; The Highland Council; SNH; Scottish Canals; review costs £4750.

Objective 6 g - A “twinning” arrangement is agreed with the managers of Duchess Wood LNR in Helensburgh

In August 2014, Merkinch Greenspace Directors visited Duchess Wood LNR in Helensburgh. Helpful working relationships were formed with members of the Duchess Wood LNR committee, and they and the Directors are keen to maintain this link. The Directors wish to make this semi-formal through a twinning arrangement. As far as the author is aware, there are no existing twinned Local Nature Reserves, so there is an opportunity for Duchess Wood and Merkinch LNRs to lead by example in this respect. Advice may be sought from the SNH Local Nature Reserve officer via the Dingwall area office.

Measure 1: Twinning between Duchess Wood and Merkinch LNRs agreed by end 2016.

Measure 2: Twinning publicised on Merkinch LNR website, Facebook page, press release etc by end 2016.

Measure 3: Twinning publicised on Merkinch signage as and when signs are replaced.

Resources: Friends of Merkinch LNR; Friends of Duchess Wood LNR; Merkinch LNR management group; SNH LNR officer; Space by the Water Project (for production of new signage).

Objective 6 h - The Friends undertake ‘Learning Visits’ to other LNRs and host visits from Duchess Wood LNR and other similar groups

As part of the ongoing training of Merkinch Greenspace Directors (soon to become Friends of Merkinch LNR), it would be helpful for Directors to be able to visit other comparable LNRs in order to foster their own understanding and to explore issues to mutual benefit. Duchess Wood LNR committee members have expressed their enthusiasm to visit Merkinch LNR by return, and it is hoped that, in future, they will have a presence at least at annual Merkinch LNR events.

Measure 1: Friends of Merkinch LNR visit at least one other LNR during the period 2015 – 2018.

Measure 2: Friends of Duchess Wood are invited to visit Merkinch LNR at least annually during the period 2015 – 2018.

Resources: Friends of Merkinch LNR; Friends of Duchess Wood LNR; committee of another LNR; costs to be covered under management plan review as at objective 6 f above.

Objective 6 i - “Recycling on the Go” bins are provided at the turning circle and canal entrances to the Reserve

It was identified at the public consultation day in October 2014 that there is currently no recycling provision on the Reserve. It was therefore suggested that recycling bins be provided at the main entrances to the site. This would demonstrate sound environmental practice and set a good example to Reserve visitors.

Measure 1: “Recycling on the Go” bins are in place at the turning circle and canal entrances to the Reserve by end 2015.

Methods: Liaise with Ross-shire Waste Action Network (RoWAN) and The Highland Council to install recycling points. These organisations may be able to fund the provision.

Resources: Friends of Merkinch LNR; RoWAN; The Highland Council.

Objective 6 j - The Reserve helps to deliver the outcomes identified within the Highland Single Outcome Agreement

The reserve has the potential to provide the perfect environment for activities outlined in the Highland Single Outcome Agreement

http://www.highland.gov.uk/downloads/file/4613/single_outcome_agreement_3 for example the Green Gym and other volunteering opportunities, which would result in a range of benefits for the local community.

Resources: Advice from The Highland Council and SNH

9. Tables of objectives

Aim	Objective	Measure	Potential delivery organisation	Timing	2015	2016	2017	2018	Total
1	To increase the benefits to individuals and communities through active involvement with the reserve	1a Provide additional seating on seawall, overlooking "heron pool" and in "amphitheatre" near entrance to Westfield	1a1 2 additional benches in place in "amphitheatre"	Friends of Merkinch LNR / Space by the Water project	By end 2015	£ 1,050			£ 1,050
			1a2 3 structures combining bird hides and sheltered seating to be installed along sea wall and adjacent to the "heron pool"	Friends of Merkinch LNR / Space by the Water project	By end 2016				
	1b Promote Reserve facilities to all local GP practices	1b1 All GPs operating in the postcodes identified in the consultation questionnaires are aware of the recreational and health promoting opportunities of the Reserve	Friends of Merkinch LNR / Community Health Co-ordinator / Scottish Waterways Trust						
	1c Update Reserve walks leaflet to reflect any new paths and / facilities created	1c1 Leaflet updated by March 2017 assuming successful outcome of Space by the Water Project	Friends of Merkinch LNR / Rotary Club Inverness Culloden / The Highland Council's Ranger Service / Community Health Co-ordinator	March 2017					
	1d Liaise with The Highland Council on the continued maintenance of football pitches for all-year use	1d1 Continue to maintain as required	The Highland Council / Friends of Merkinch LNR						
		1d2 The feasibility of installing secure on-site equipment storage is investigated	The Highland Council / Friends of Merkinch LNR						

Aim		Objective		Measure		Potential delivery organisation	Timing	2015	2016	2017	2018	Total
1	To increase the benefits to individuals and communities through active involvement with the reserve	1e	Train local people to act as volunteer Reserve rangers, guided walk leaders, providers of information, basic interpretative techniques, biological recording, species and habitat management	1e1	Two members of local community are trained to carry out species and habitat management	Friends of Merkinch LNR / The Conservation Volunteers / Scottish Waterways Trust	Summer 2015					
				1e2	A Merkinch Local Ranger Development Officer is appointed	Friends of Merkinch LNR / Merkinch Enterprise / For the Right Reasons project	End 2015		£27,500	£27,500	£27,500	£82,500
				1e3	Two members of local community are trained to carry out biological recording	Merkinch Enterprise / The Highland Council's Biodiversity Officer / Highland Biological Recording Group / Botanical Society of the British Isles	Spring 2017					
				1e4	Two members of local community are trained to carry out education / information / interpretation, effectively operating as voluntary Reserve rangers	Merkinch Enterprise / The Highland Council's Ranger Service / Scottish Waterways Trust	Spring 2017					
		1f	Organise a monthly work day on the Reserve as an opportunity for all local people to get involved	1f1	A monthly work day is established on the Reserve	Friends of Merkinch LNR / The Conservation Volunteers / For the Right Reasons Project	Summer 2015					

Aim		Objective		Measure		Potential delivery organisation	Timing	2015	2016	2017	2018	Total
1	To increase the benefits to individuals and communities through active involvement with the reserve	1g	Involve Merkinch Primary School pupils in structured litter picking events	1g1	Merkinch School pupils visit the Reserve quarterly for the purpose of litter picking	Merkinch School / John Muir Award / Ross-shire Waste Action Network	From summer 2015					
		1h	Promote the Reserve in the context of it's ease of access from Inverness on foot or bicycle	1h1	Signs in the city centre direct cyclists and walkers to the Reserve	Friends of Merkinch LNR / The Highland Council's Access Officer for Inverness / Space by the Water project	End 2017					
				1h2	Signs at other nearby attractions such as the Caledonian Canal, the Great Glen Way and Carnac Point direct cyclists and walkers to the Reserve	Friends of Merkinch LNR / The Highland Council's Access Officer for Inverness / Space by the Water project	End 2016					

Aim	Objective	Measure	Potential delivery organisation	Timing	2015	2016	2017	2018	Total			
2	To celebrate the wildlife value of the Reserve through the conservation and sustainable management of its habitats and species	2a	The Reserve maintains a detailed inventory of habitats and species	2a1	Two members of local community are trained to carry out biological recording	Merkinch Enterprise / Training providers / The Highland Council's Biodiversity Officer / Botanical Society for the British Isles / University of the Highlands and Islands / Scottish Waterways Trust	Spring 2017					
				2a2	All wildlife records are collated in liaison with the Highland Biological Records Centre	Highland Biological Recording Group / The Highland Council's Biodiversity Officer / Botanical Society for the British Isles / Scottish Waterways Trust						
		2b	Attractive leaflets / other media are made available highlighting seasonal wildlife to Reserve visitors	2b1	A bird leaflet is in place, printed and on-line	Friends of Merkinch LNR / Local bird recorders / Highland Biological Recording Group / Merkinch Enterprise	End 2015					
				2b2	Flowering plant and mammal leaflets are in place, printed and on-line	Friends of Merkinch LNR / Highland Biological Recording Group / Merkinch Enterprise	End 2016					
	2b3			A sea shore animal leaflet is in place, printed and on-line	Friends of Merkinch LNR / Highland Biological Recording Group / Merkinch Enterprise	End 2017						
	2b4			Tree / shrub and fungi leaflets are in place, printed and on-line	Friends of Merkinch LNR / Highland Biological Recording Group / Merkinch Enterprise	End 2018						

Aim	Objective	Measure	Potential delivery organisation	Timing	2015	2016	2017	2018	Total			
2	To celebrate the wildlife value of the Reserve through the conservation and sustainable management of its habitats and species	2c	The Reserve website is kept up-to-date with species records	2c1	The website is updated with species records at least monthly	Friends of Merkinch LNR / The Highland Council's Biodiversity Officer / The Highland Council's Ranger Service / Highland Biological Recording Group						
		2d	The Reserve is a place where practical conservation work is promoted	2d1	The working relationship with The Conservation Volunteers is re-established and practical work resumes on the Reserve on the part of the Green Gym project	Friends of Merkinch LNR / The Conservation Volunteers / Royal Society for the Protection of Birds / Merkinch and South Kessock Network / Community Health Co-ordinator	Spring 2015	£ 3,600	£ 3,600	£ 3,600	£ 3,600	£ 14,400
				2d2	Two members of local community are trained to carry out species and habitat management	Friends of Merkinch LNR / The Conservation Volunteers / Royal Society for the Protection of Birds / Merkinch and South Kessock Network / Community Health Co-ordinator	Summer 2015					
		2e	Local volunteers take responsibility for the management of invasive non-native plant species	2e1	Two members of local community are trained to carry out species and habitat management	Friends of Merkinch LNR / The Conservation Volunteers	Summer 2015					
				2e2	All invasive non-native species populations are decreasing	Friends of Merkinch LNR / The Conservation Volunteers	End 2015					
				2e3	The Reserve Facebook page is used by visitors to alert Friends of Merkinch LNR to new populations of invasive non-native species	Friends of Merkinch LNR / The Conservation Volunteers						

Aim		Objective		Measure		Potential delivery organisation	Timing	2015	2016	2017	2018	Total
2	To celebrate the wildlife value of the Reserve through the conservation and sustainable management of its habitats and species	2f	Local volunteers take responsibility for the management of dead wood, where required for the safety of visitors	2f1	All standing dead wood adjacent to paths made safe	Friends of Merkinch LNR / The Conservation Volunteers / tree surgeon	Summer 2015	£ 500			£ 500	
				2f2	Two members of the local community are trained to carry out woodland management	Friends of Merkinch LNR / The Conservation Volunteers / training providers	Autumn 2015					
		2g	The Reserve is a place where students and researchers provide valuable management support information and biological records	2g1	Develop formal link with Inverness College, agree and maintain list of potential student projects at HE and FE levels	Friends of Merkinch LNR / The Highland Council's Biodiversity Officer						

Aim	Objective		Measure		Potential delivery organisation	Timing	2015	2016	2017	2018	Total
To maximise the learning opportunities afforded by the Reserve, and to communicate the importance of the wildlife to the local community, Inverness residents and visitors to the area	3a	All interpretation delivered through up-to-date interpretation plan	3a1	All interpretation on or about the Reserve uses the themes identified within the Reserve Interpretive Plan http://www.merkinchlnr.org.uk/pdf/Merkinch_LNR_Intepretive_Plan.pdf	Friends of Merkinch LNR / The Highland Council						
	3b	Information on the use of the Reserve by schools is collated	3b1	Groups e-mail the Reserve website when visiting the site							
			3b2	Groups contact the volunteer Ranger when visiting the site							
	3c	Provide programme of 7 events each year, open to all	3c1	4 quarterly early evening walks around the Reserve are held	Friends of Merkinch LNR / The Highland Council's Ranger Service	2015					
			3c2	A Reserve Open Day, celebrating what is special about the Reserve, is held annually	Friends of Merkinch LNR / The Highland Council's Ranger Service / local artists and musicians	Annual (summer)					
			3c3	Two additional specialist events, such as "BioBlitz" days, are held annually	Friends of Merkinch LNR / The Highland Council's Biodiversity Officer / Highland Biological Recording Group / Royal Society for the Protection of Birds / further education institutes	Annual					

Aim	Objective	Measure	Potential delivery organisation	Timing	2015	2016	2017	2018	Total			
3	To maximise the learning opportunities afforded by the Reserve, and to communicate the importance of the wildlife to the local community, Inverness residents and visitors to the area	3d	Establish a clear Welcome / entry point at the roundabout / entrance to Westfield	3d1	Welcome point established	Friends of Merkinch LNR / Space by the Water project / The Conservation Volunteers	March 2016					
		3e	Construct bird-hides / sheltered seating at appropriate locations	3e1	2 additional benches in place in "amphitheatre"	Friends of Merkinch LNR	End 2015	£ 1,050				
				3e2	3 structures combining bird hides and sheltered seating to be installed along sea wall	Friends of Merkinch LNR / Space by the Water project	End 2016					
		3f	Include Merkinch LNR in any wider publicity about Inverness	3f1	VisitScotland "brown signs" publicising the Reserve are in place at agreed locations within Inverness	Friends of Merkinch LNR / Merkinch Enterprise / The Highland Council / BEAR Scotland / VisitScotland	End 2016					
		3g	Work in partnership with the information centre in the ticket office			Friends of Merkinch LNR / Dell McLurg						
		3h	Build a log cabin within the "amphitheatre" area	3h1	Log cabin constructed	Friends of Merkinch LNR / Merkinch Enterprise	End 2016					
		3i	Create managed opportunities for local children to build dens on the Reserve	3i1	All future dens built on the Reserve are of natural material	Friends of Merkinch LNR / Forest Schools						
		3j	Develop on-site and off-site information about the wrecks of the two boats near the mouth of the Caledonian Canal	3j1	On-site and off-site information in place	Friends of Merkinch LNR / Scottish Canals / Space by the Water project	End 2016					

Aim	Objective	Measure	Potential delivery organisation	Timing	2015	2016	2017	2018	Total		
4	To improve and upgrade access provision to and within the Reserve	4a	Maintain existing routes to provide dry, firm surface, clear of vegetation and accessible to all	4a1	Paths are maintained at a working width of 2.1 metres (for mixed use) and with smooth and dry surfaces.	Friends of Merkinch LNR / For the Right Reasons project / The Conservation Volunteers / Scottish Waterways Trust Canal College project					
		4b	Continually replace any vandalised access furniture	4b1	Vandalised access furniture is repaired within 1 month of the occurrence	Friends of Merkinch LNR / The Conservation Volunteers					
		4c	Promote walking on the Reserve in line with the National Walking Strategy http://www.scotland.gov.uk/Publications/2014/06/5743	4c1	Merkinch LNR management group members make themselves familiar with the strategy and follow its recommendations in order to promote walking on the Reserve	Merkinch LNR Management Group / Scottish Natural Heritage / The Highland Council's Access Officer for Inverness	End 2015				
		4d	Promote "cycling prescriptions" on Merkinch LNR in liaison with Fairfield Medical Practice and Velocity Café	4d1	Cycling prescriptions are offered from Fairfield Medical Practice	Friends of Merkinch LNR / Merkinch and South Kessock Network / Community Health Co-ordinator / Velocity Café / Fairfield Medical Practice	End 2016				
		4e	Promote the wider potential health benefits of the Reserve in partnership with the NHS Health Officer			Friends of Merkinch LNR / Community Health Co-ordinator / Merkinch and South Kessock Network / Scottish Waterways Trust / Aonach Mòr project					

Aim		Objective		Measure		Potential delivery organisation	Timing	2015	2016	2017	2018	Total
4	To improve and upgrade access provision to and within the Reserve	4f	Create new path along desire line through Westfield as identified in Muirtown and South Kessock Charrette, if found to be compatible with proposed new housing adjacent to the Reserve	4f1	Path in place, if agreed, and built to required standards	Friends of Merkinch LNR / Space by the Water project / The Highland Council's Access Officer for Inverness	End 2016					
		4g	Create a circular path around Carnarc Point through the Space by the Water Project	4g1	A circular path is in place around Carnarc Point	Friends of Merkinch LNR / Merkinch LNR Management Group / Space by the Water project / The Highland Council's Access Officer for Inverness	End 2017					
		4h	Provide ramp off Caledonian Canal linking to Reserve path network that is Disability Discrimination Act compliant and meets the requirements of Historic Scotland for the Scheduled Ancient Monument	4h1	A ramp is in place	Friends of Merkinch LNR / Merkinch LNR Management Group / Space by the Water project / Historic Scotland / Scottish Canals / Scottish Waterways Trust Canal College project	End 2018					

Aim		Objective		Measure		Potential delivery organisation	Timing	2015	2016	2017	2018	Total
4	To improve and upgrade access provision to and within the Reserve	4i	Provide additional picnic benches in the "amphitheatre" area	4i1	2 additional picnic benches are in place	Friends of Merkinch LNR / Iain Chalmers	End 2015	£ 1,050				
		4j	Provide additional monolith signs outwith the Reserve boundary	4j1	Additional monolith signs in place	Merkinch LNR Management Group; The Highland Council's Access Officer; Space by the Water Project	End 2017					
		4k	Promote responsible use of the Reserve by dog walkers	4k1	Three additional dog bins are in place, in locations agreed by Friends of Merkinch LNR	Friends of Merkinch LNR; The Conservation Volunteers' Green Gym project; The Highland Council's Dog Warden; volunteer Rangers	End 2015					
				4k2	Friends of Merkinch LNR approach The Highland Council to request increased Dog Warden presence on the Reserve	Friends of Merkinch LNR; The Conservation Volunteers' Green Gym project; The Highland Council's Dog Warden; volunteer Rangers	Summer 2015					
				4k3	Volunteer Rangers police dog use once they are in place (see Objective 1 f above)	Friends of Merkinch LNR; The Conservation Volunteers' Green Gym project; The Highland Council's Dog Warden; volunteer Rangers						

Aim	Objective	Measure	Potential delivery organisation	Timing	2015	2016	2017	2018	Total	
5	To establish governance for the reserve that will sustain its management through innovative access to funding sources	5a The Reserve has its own "Friends of Merkinch LNR" group that is responsible for the Reserve to local people, funders and partners	5a1	The Friends of Merkinch LNR are formally constituted	Merkinch LNR management group; Friends of Merkinch LNR; Merkinch Enterprise	March 2015				
			5a2	Fifty members are recruited to Friends of Merkinch LNR	Merkinch LNR management group; Friends of Merkinch LNR; Merkinch Enterprise	End 2015				
			5a3	Two hundred members are recruited to Friends of Merkinch LNR	Merkinch LNR management group; Friends of Merkinch LNR; Merkinch Enterprise	End 2018				
	5b	The Reserve extends to include Carnarc Point to ensure its long term management for local access and amenity			Friends of Merkinch LNR; Inverness Harbour Trust					

Aim	Objective	Measure	Potential delivery organisation	Timing	2015	2016	2017	2018	Total			
6	To deliver best practice management for the Reserve that will be an example for other reserves	6a	To maintain an up to date Health and Safety policy following risk assessment for visitors to the Reserve and undertake a site risk assessment twice yearly	6a1	Health and Safety Policy in place and implemented	The Highland Council Ranger Service; Scottish Canals	Twice yearly					
		6b	The Reserve employs a range of locally based people, and works in partnership with a range of local groups, who are central to delivering the management plan		See objectives 1 f, 2 d, 2 e, 2 f above							
		6c	To monitor the number of visitors to the Reserve	6c1	Accurate counts of the number of passes are obtained at all three stations	The Highland Council's Ranger Service	All years					
		6d	The Merkinch LNR management group regularly reports back to the community on progress on the Reserve	6d1	Community feel informed and engaged with work on Reserve	Friends of Merkinch LNR; Merkinch Enterprise; Merkinch News and Views; The Highland Council's Biodiversity Officer; The Highland Council's Ranger Service						
				6d2	Quarterly Reserve update included in Merkinch News and Views	Friends of Merkinch LNR; Merkinch Enterprise; Merkinch News and Views; The Highland Council's Biodiversity Officer; The Highland Council's Ranger Service		£ 25	£ 25	£ 25	£ 25	£ 100

Aim		Objective		Measure		Potential delivery organisation	Timing	2015	2016	2017	2018	Total
6	To deliver best practice management for the Reserve that will be an example for other reserves	6e	The Reserve produces an Annual Report for the community, funders and partners	6e1	Annual Report produced, with limited circulation but published on LNR website	Overseen by Merkinch LNR management group, but contracted out		£ 1,400	£ 1,400	£ 1,400	£ 1,400	£ 5,600
		6f	The Management Plan is reported on every year and is reviewed every 3 years	6f1	Plan evaluated / updated annually major review Year 3	LNR management group; The Highland Council; SNH; Scottish Canals					£ 4,750	£ 4,750
		6g	A “twinning” arrangement is agreed with the managers of Duchess Wood LNR in Helensburgh	6g1	Twinning between Duchess Wood and Merkinch LNRs agreed	Friends of Merkinch LNR; Friends of Duchess Wood LNR; Merkinch LNR management group; SNH LNR officer; Space by the Water Project (for production of new signage)	End 2016					
				6g2	Twinning publicised on Merkinch LNR website, Facebook page, press release etc	Friends of Merkinch LNR; Friends of Duchess Wood LNR; Merkinch LNR management group; SNH LNR officer; Space by the Water Project (for production of new signage)	End 2016					
6g3	Twinning publicised on Merkinch signage as and when signs are replaced	Friends of Merkinch LNR; Friends of Duchess Wood LNR; Merkinch LNR management group; SNH LNR officer; Space by the Water Project (for production of new signage)										

Aim	Objective	Measure	Potential delivery organisation	Timing	2015	2016	2017	2018	Total		
6	To deliver best practice management for the Reserve that will be an example for other reserves	6h	The Friends undertake 'Learning Visits' to other LNRs and host visits from Duchess Wood LNR and other similar groups	6h1	Friends of Merkinch LNR visit at least one other LNR during the period 2015 – 2018	Friends of Merkinch LNR; Friends of Duchess Wood LNR; committee of another LNR			£ 250	£ 250	
				6h2	Friends of Duchess Wood are invited to visit Merkinch LNR	Friends of Merkinch LNR; Friends of Duchess Wood LNR; committee of another LNR	At least annually				
		6i	"Recycling on the Go" bins are provided at the turning circle and canal entrances to the Reserve		"Recycling on the Go" bins are in place at the turning circle and canal entrances to the Reserve	Friends of Merkinch LNR; Ross-shire Waste Action Network; The Highland Council	End 2015				
		6j	The Reserve helps to deliver the outcomes identified within the Highland Single Outcome Agreement			The Highland Council and SNH					

10 Glossary

BioBlitz = an intense period of biological surveying in an attempt to record all the living species within a designated area.

Biodiversity = the variety of life – plant and animal. The term came into common use following the Rio convention in 1992.

Biological assets = the wildlife that makes the Reserve special

Charrette = French word for “little cart”. In Paris during the 19th century, professors at the École de Beaux Arts (school of fine arts) circulated with little carts to collect final drawings from their students. Students would jump on the "charrette" to put finishing touches on their presentation minutes before the deadline. The term is now used in a planning context to mean an intensive planning session where citizens, designers and others collaborate on a vision for development.

Conservation = the wise management of resources for their long-term protection.

Designation = the giving of protected status to land, for example to protect wildlife

Governance = act of governing / management

Greenspace = any open piece of land that is undeveloped (has no buildings or other built structures) and is accessible to the public. It is partly or completely covered with grass, trees, shrubs, or other vegetation, and includes parks, community gardens, and cemeteries.

Habitat = a place where a plant or animal lives

Hydrology = the scientific study of the movement, distribution, and quality of water

Infrastructure = the basic physical and organizational structure needed for the operation of a society or enterprise, or the services and facilities necessary for an economy to function.

Interpretation = information about wildlife or other heritage. This information may be on-site (e.g. noticeboards, weather-resistant maps) or off-site (books, leaflets, websites etc).

Invasive non-native plant species (INNS) = plants that came from abroad that often grow very vigorously in Britain at the expense of our own plant species. A classic example is Japanese knotweed.

Invertebrates = animals without backbones, such as insects, spiders, crabs and cockles.

RAMSAR site = A European conservation designation designed to protect wetlands, and which came about in the Iranian city of Ramsar.

Scheduled Ancient Monument = a monument of national importance that Scottish Ministers have given legal protection under the Ancient Monuments and Archaeological Areas Act 1979. Although the majority are on land, a small number lie under the sea.

Single Outcome Agreement = an agreement between the Community Planning Partnership and the Scottish Government that sets out what a local authority hopes to achieve.

Special Area of Conservation (SAC) = A European conservation designation that is concerned with protecting habitat.

Special Protection Area (SPA) = A European conservation designation that is concerned with protecting birds.

Species = any type of animal or plant. Two animals or plants of the same species will be able to breed with one another and to produce fertile young.

Sub-tidal = part of the sea that lies just below the low-water mark and is therefore always under water.

11 Sources of information

SNH general guidance on Local Nature Reserves <http://www.snh.org.uk/pdfs/lhrs/finguide.pdf>

SNH Local Nature Reserve management planning guidance

<http://www.snh.gov.uk/docs/C46076.pdf>

Greenspace Scotland guide to sources of funding <http://greenspacescotland.org.uk/funding-sources.aspx>

SNH guide to funding for natural heritage projects <http://www.snh.gov.uk/docs/A340448.pdf>

Information on management of Michaelmas daisy <http://www.conservationevidence.com/individual-study/19>

Duchess Wood LNR website <http://duchesswood.org.uk/Home.php>

Appendices

Appendix 1

Initial evaluation questionnaire sent to Merkinch Greenspace Directors

MERKINCH LNR MANAGEMENT PLAN 2014-2017

INITIAL EVALUATION / TRAINING NEEDS QUESTIONNAIRE

We are working together to produce the updated management plan for the Reserve. We will need to know how successful this project has been when it is complete. This questionnaire will help us find out how you view your current skills in managing the Reserve, as well as identifying your training needs for the task. We will also send you a similar questionnaire at the end of the project, to see how your views have changed.

Please mark one of the five boxes on the right to show how much you agree with each statement on the left. Don't spend too much time thinking about this – go with your gut feeling!

Please return your completed questionnaire (either paper or electronic) to Anne Sutherland **no later than Friday 13 June.**

Thank you!

Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
I understand what a Local Nature Reserve is and why it is important.					
The team running Merkinch LNR is a strong one.					
I feel proud of Merkinch LNR.					
I am confident that any problems the LNR currently faces can be solved.					
I feel confident in approaching members of the public visiting the Reserve and asking them their views on how the Reserve should be managed.					
I know where to get help if I feel that I'm struggling with my work of managing Merkinch LNR.					
I know about other LNRs in Scotland and feel that I can see Merkinch LNR in the context of all the other Reserves.					
I know how to manage the wildlife on Merkinch LNR.					
I know what wildlife habitats are on Merkinch LNR and how they need to be managed.					
I know how people need to be managed on Merkinch LNR.					
I would feel confident to chair a meeting of the Merkinch Greenspace Directors and / or the LNR Management Group.					
I have lots of ideas as to how Merkinch LNR could be managed better.					
I would enjoy telling people about how wonderful Merkinch LNR is, even on video or on TV!					
I know people who help manage other LNRs and would be happy to call on them for advice.					
Additional Comments (write on the back of this sheet if you need more space):					
<p>You can remain anonymous if you wish, but it would be helpful to us if you could include your name here:</p>					

Appendix 2

Summary of public questionnaire results

Question	Response	%	
I am aware that LNR exists	Yes	81	
	No	19	
Regular visitor	Yes	53	
	No	44	
How often	Daily	13	
	Twice a week	3	
	3 - 4 times a week	2	
	Weekly	13	
	Fortnightly	3	
	15 - 20 times a year	2	
	Once or twice a month	1	
	Monthly	10	
	3 - 4 times a year	3	
	Twice a year	2	
Proud of LNR	Yes	71	
	No	8	
Feels safe in LNR	Yes	64	
	No	9	
Reasons for above	Fear of dark	1	
	Fear of loiterers	2	
	Rough seas	1	
	Rough paths	1	
	Fear of motorbikes	3	
	Fear of dogs	3	
Activities	Fear of wildlife!	1	
	Dog walking	38	
	Duck feeding	26	
	Wildlife watching	44	
	Walking	57	
	Cycling	25	
	Playing	21	
	Sport	16	
	Other	8	
	Confident talking to other visitors	Yes	61
No		24	
LNR function	Wildlife	36	
	People	13	
	Education	11	
	Protect land from development	12	
Would like to help	Yes	31	
	No	47	
Desires	Paid staff	40	
	More / better paths	43	
	More / better wildlife watching facilities	48	
	More seating	45	
	More LNR events	45	
	Better signage	29	
	Other	3	
	Playpark	4	
	Litter bins	1	
	Litter picking events	1	
	Tea-room / toilets	1	
	Shelters	1	
	Dog bins	1	
	Vegetation cut back	1	
	Visits from dog warden	1	
	Barbeque site	1	
Likes	Peace / tranquility	15	
	Wildlife	34	
	Location	1	
	Ease of access	7	
	People working together	2	
	Activities for children	1	
	Local greenspace	16	
	Scenery	9	
	Walks / paths	3	
	Adventure	1	
	Friendly people	1	
	Place to relax	3	
	Sports field	11	
	Trees to climb	10	
	Close to water	10	
	Dog walking provision	1	
	Seashore	1	
	Dislikes	Litter	6
		Overgrown vegetation	3
		Tree damage	1
Fear of unknown		3	
Drug / alcohol related issues		3	
Dog fouling		10	
Motorbikes		6	
Antisocial behaviour		2	
Fly tipping		2	
Dogs behaviour		2	
Lack of shelter		1	
Uneven paths		1	
Vandalism		1	
Muddy paths		2	
Age range		Under 20	29
	21 - 35	9	
	36 - 50	29	
	51 - 70	29	
	70+	3	
Gender	Male	39	
	Female	42	
Ethnic background	Scottish	28	
	White Scottish	32	
	Viking	1	
	White British	2	
	White Australian	1	
	Welsh	2	
	British	5	
	Irish	1	
	English	2	
	White European	2	
	White English	2	
Kurdish	1		

Sample size = 118

Notes on the results:

- Not everyone uses the Reserve or is aware of its existence.
- The most frequent postcodes of respondents were IV3 8HY (15% – though these were all primary school pupils); IV3 8SP (7% - this is the Rosehaugh Road area) and IV3 8AJ (4% - this is the Kessock Road area).
- Not everyone answered all the questions, so the percentages for either / or questions do not necessarily add up to 100.

Appendix 4

Update of data held by the Highland Biological Records Centre 12 November 2014

Species	Description	Date	Location	NGR	Abundance	Observer	Determiner	Comment	Type
<i>Nesovitrea hammonis</i>	Land snail	26/05/2013	Merkinch	NH652466	1	Adrian Sumner	Adrian Sumner	Habitat: salt marsh.	field record
<i>Deroceras reticulatum</i>	Grey garden slug	26/05/2013	Merkinch	NH652466	1	Adrian Sumner	Adrian Sumner	Habitat: salt marsh.	field record
<i>Deroceras laeve</i>	Marsh slug	26/05/2013	Merkinch	NH652466	4	Adrian Sumner	Adrian Sumner	Habitat: salt marsh.	field record
<i>Potamopyrgus antipodarum</i>	New Zealand mud snail	19/07/2013	Merkinch	NH65174668	many	Adrian Sumner	Adrian Sumner	Habitat: bank of brackish lagoon.	field record
<i>Potamopyrgus antipodarum</i>	New Zealand mud snail	26/05/2013	Merkinch	NH651466	many	Adrian Sumner	Adrian Sumner	Habitat: shore of tidal lagoon.	field record
<i>Deroceras reticulatum</i>	Grey garden slug	26/05/2013	Merkinch	NH651466	4	Adrian Sumner	Adrian Sumner	Habitat: shore of tidal lagoon.	field record
<i>Deroceras panormitanum</i>	Land slug	26/05/2013	Merkinch	NH651466	4	Adrian Sumner	Adrian Sumner	Habitat: shore of tidal lagoon.	field record
<i>Arion subfuscus</i>	Land slug	26/05/2013	Merkinch	NH651466	2	Adrian Sumner	Adrian Sumner	Habitat: shore of tidal lagoon.	field record
<i>Arion flagellus</i>	Durham slug	26/05/2013	Merkinch	NH651466	2	Adrian Sumner	Adrian Sumner	Habitat: shore of tidal lagoon.	field record
<i>Microtus agrestis</i>	Field vole	04/09/2012	Merkinch LNR	NH641472	1 juv.	Stephen Moran	Stephen Moran	Torpid on path.	field record
<i>Microtus agrestis</i>	Field vole	04/09/2012	Merkinch LNR	NH641472	1 juv.	Stephen Moran	Stephen Moran	Torpid on path.	field record
<i>Gracillaria syringella</i>	Lilac leafminer moth	04/09/2012	Merkinch LNR	NH641472	sev.	Stephen Moran	Stephen Moran	Mines in Fraxinus leaf.	field record
<i>Philaenus spumarius</i>	Meadow froghopper	04/09/2012	Merkinch LNR	NH641472	sev. ad	Stephen Moran	Stephen Moran	On Alnus.	field record
<i>Alnetoidea alneti</i>	Bug	04/09/2012	Merkinch LNR	NH641472	sev. ad	Stephen Moran	Stephen Moran	On Alnus.	field record

Species	Description	Date	Location	NGR	Abundance	Observer	Determiner	Comment	Type
<i>Agromyza alnivora</i>	Fly that feeds on alder	04/09/2012	Merkinch LNR	NH641472	sev.	Stephen Moran	Stephen Moran	Mines in Alnus leaf.	field record
<i>Helophilus trivittatus</i>	Hoverfly	05/07/2012	Merkinch	NH6572946292	1	Grace Munro	Murdo Macdonald	Identified from photograph.	field record
<i>Eurrhpara hortulata</i>	Small magpie moth	05/07/2012	Merkinch	NH6572946292	1	Grace Munro	Murdo Macdonald	Confirmed by photograph.	field record
<i>Plateumaris sericea</i>	Leaf beetle	03/05/2009	Merkinch LNR	NH653469	1	Nick Sidle	Richard Jones	Identified from photograph on iSpot.	field record
<i>Heterarthrus vagans</i>	Sawfly that feeds on alder	08/10/2010	Merkinch	NH6546	sev.	Murdo Macdonald	Murdo Macdonald	Larvae in mines in Alnus glutinosa leaves.	field record
<i>Fenusa dohrnii</i>	Sawfly that feeds on alder	08/10/2010	Merkinch	NH6546	2	Murdo Macdonald	Murdo Macdonald	Larvae in mines in Alnus glutinosa leaves.	field record
<i>Gracillaria syringella</i>	Lilac leafminer moth	08/10/2010	Merkinch	NH6546		Murdo Macdonald	Murdo Macdonald	Mines on Fraxinus excelsior leaves.	field record
<i>Tipula pagana</i>	Crane fly	08/10/2010	Merkinch	NH6546	1m	Murdo Macdonald	Murdo Macdonald		field record
<i>Phytomyza ilicis</i>	Holly leaf miner	08/10/2010	Merkinch	NH6546	sev.	Murdo Macdonald	Murdo Macdonald	Galls on Ilex aquifolium leaves.	field record
<i>Dasineura ulmaria</i>	Gall midge that feeds on meadowsweet	08/10/2010	Merkinch	NH6546	sev.	Murdo Macdonald	Murdo Macdonald	Galls on Filipendula ulmaria leaves.	field record
<i>Taphrina tosquinetii</i>	Fungus that infects alder	08/10/2010	Merkinch	NH6546		Murdo Macdonald	Murdo Macdonald	Galls on Alnus glutinosa leaves.	field record
<i>Coleosporium tussilaginis</i>	Rust fungus	08/10/2010	Merkinch	NH6546		Murdo Macdonald	Murdo Macdonald	On Tussilago farfara leaves.	field record
<i>Acalitus rudis</i>	Gall mite	08/10/2010	Merkinch	NH6546	1	Murdo Macdonald	Murdo Macdonald	Galls on Betula leaves.	field record
<i>Orchesella cincta</i>	Springtail	24/08/2010	Merkinch	NH658463	1	Grace Munro	Joe Botting	Identified by photograph on 'Wild about Britain'. Collembola.	field record

Appendix 5

Green Infrastructure Fund – Expression of Interest Space by the Water – Inverness October 2014

A. Introduction

This proposal is for a project titled Space by the Water which forms the Highland Council's Expression of Interest for funding from the Scottish Government's Green Infrastructure Fund. The Highland Council seeks funding towards creating new and improved high quality green spaces that combine to create an integrated network of green space along the line of the River Ness, Caledonian Canal and the seafront at South Kessock. We also propose improvements to the movement network to maximise the accessibility of these spaces for surrounding communities and thereby improve quality of life. By providing new and exciting spaces the proposal would deliver significant benefits to recognised regeneration areas and would re-engage communities and visitors alike with the natural environment and coastal setting of the City, whilst improving conditions for flora and fauna.

B. Origin of the project

Muirtown and South Kessock (along with neighbouring Clachnaharry) benefit from being the only built up areas of the City where there is a direct interface with the Moray Firth and Beaulie Firth coastline, with green and natural areas that make it a natural asset. Yet, all five data zones covered by the project area are within the 15% most deprived in Scotland and are the most deprived in Highland. Unlike many of the SIMD areas in Scotland, South Kessock is surrounded by:

- a scheduled ancient monument and green corridor - the Caledonian Canal;
- an iconic Salmon River - The River Ness; and
- the Merkinch Local Nature Reserve.

In addition, its northern intertidal and sea boundary with the Moray Firth and Beaulie Firth has global, European and national designations for wintering birds plus European and national designations for Bottle-nosed Dolphins. These dolphins can be seen from the shore at South Kessock. The quality of habitats that bound South Kessock are as good as you will find anywhere in Scotland.

Despite these qualities, the area is under-utilised by City residents and visitors alike and suffers from negative perceptions. The 'Far North' rail line dissects the area and effectively cuts off South Kessock from the rest of the City. In light of the above, the Highland Council's Highland-wide Local Development Plan (2012) identifies Muirtown & South Kessock as a regeneration area.

The Council has been working closely with people living, working and using these areas to draw up Development Briefs to guide future development and regeneration opportunities. Earlier this year members of the community in the Muirtown, Merkinch and South Kessock areas worked collaboratively with Highland Council and Scottish Canals at the Muirtown & South Kessock Charrette. The purpose of the Charrette was to seek agreement on the regeneration development opportunities and priorities for these areas that would help to deliver regeneration. Participants were very keen to better utilise and exploit the seafront setting in Muirtown and South Kessock for the wider City, to attract people to experience to this underused and undervalued area. The ideas for achieving this included improving green spaces along the watercourses for people and wildlife, creating new attractions and improving access to the area.

The culmination of these ideas is the Space by the Water project. The original illustration from the Charrette is shown in **Appendix 1** and an updated Outline Masterplan can be found at **Appendix 2**.

C. What will it deliver?

The Council is already delivering a number of improvements in the area that aim to set the foundation for revitalisation, regeneration and protection of the City's assets and neighbourhoods. We are delivering various housing and employment developments in the area (see Appendix 2) a number of which are identified in the Council's Vacant & Derelict Land survey. Further opportunities for re-use of vacant and under-used land and green areas form an integral part of this project and are summarised below. The River Ness Flood Alleviation Scheme is also well underway and will include public art along the riverside (see **Appendix 3**).

The Space by the Water project will provide an integrated network of high quality green spaces that follow the river, canal and seafront. The areas of green space vary in size and function, and each will serve to improve the perception of the area and will allow people to re-engage and interact with the natural assets that are on their doorstep. The overall result will be significant enhancements to quality of life for local communities and for the wider City. The continuous active travel routes along green corridors connecting the City Centre and surrounding neighbourhoods with the natural and water environment, catering for both functional and recreational journeys. New and improved facilities, spaces and buildings along these routes would stimulate interest and provide a reason to visit the area.

This proposal comprises two key components that will make the project a success: the provision of new and improved green spaces, and improved access to these spaces.

1. Provision of new and improved Space by the Water

- a) **Anderson Street Park** area to include habitat creation, landscape improvements, orientation and information boards, seating areas. This will also include upgrade of the adjacent footpath and directional signage.
- b) The proposal for **Carnac Point** plays a central role in the regeneration of the area. Carnac Point is a unique landscape feature which protrudes into the Moray Firth from which there is an excellent view of the surrounding harbour, South Kessock and the Kessock Bridge. However, without any obvious signage and with untidy landscaping visitors would be forgiven for passing it by. The proposed improvements include a new stone clad wall and gateway feature at the entrance on Kessock Road, along with new seating, signage and interpretation boards at each end of the Point and a new path running along its length. We also seek to maximise habitat creation in the area – which could include filling gaps between the rocks above the high tide line with crushed rock of a small diameter to mimic natural shingle beaches or rocks shores.

1a) Anderson Street Park



1b) Carnac Point entrance



- c) **Viewpoint at "Tangled Towers"**, Kessock Road. This relates to an area of disused land owned by the Council situated a short distance beyond Carnac Point. The area of concrete surfacing shown in the photo above (the bases of old garages) would be removed and replaced with an attractive landscaped area with a seating viewpoint and interpretation boards and potential for public art, along with a small number of parking spaces. We are aware that a

planning application has been received by the Council for the sensitive refurbishment of the adjacent vacant residential dwelling known as Tangled Towers. This would complement the proposal for the viewpoint in improving the general appearance and feel of the area. Alongside, the grass verges on the seaward side of Kessock road are very attractive and would be retained and enhanced as an important green habitat corridor.

1c) Viewpoint adjacent to Tangled Towers



1d) South Kessock Pier



- d) The **South Kessock Pier** area is situated at the far end of Kessock Road and while it benefits from magnificent views across the Firth the quality of the general environment is poor. The approach to the pier car park is dominated by tarmac surfacing and a large central lighting column sits within a tarmacked roundabout / turning circle. The rather unattractive former ferry ticket office sits at the landward end of the pier and has seen occasional use by the community in the past. The green areas around the shore include some picnic tables and seats and 'wild coasts' interpretive signage, with further signage on the opposite side towards the entrance to the Merkinch Nature Reserve.

Proposals here include landscaping of the central roundabout, with new surface treatment in parking areas, new replacement lighting column(s), new metal railings on approach to pier and paving around the pier building. Alongside the green improvements outlined we propose a small visitor/interpretation Centre and Dolphin/Bird Viewing Centre which can secure a long term use for the former ferry ticket office and provide a focal point for visitors and the local community. This would be supported by partners such as RSPB, Scottish Canals and the Council's own Ranger Services who would work in partnership to provide regular classes and events for both visitors, communities and schools.

1e) Merkinch Nature Reserve

- e) At the **Merkinch Nature Reserve** improvements would include an improved seawall walkway with central viewing platform and interpretation boards and sheltered seating elsewhere along the length of the path providing views across the Firth. A new path would also be provided connecting the residential area with the South Kessock Pier following a desire line in the grass. There may also be scope within the recreational areas of the Merkinch Nature Reserve to develop either allotments or community garden(s) for sustainable food production. This would be discussed with local communities before being taken forward.
- f) A number of other small scale green space improvements are proposed alongside the improved steps and ramps at Muirtown Basin, and alongside the path improvements on Carse Road. See 2 below.

2. Improving access to Space by the Water

The network of green spaces are relatively well connected, however, there are certain locations where the links to the local community and the quality of access to these spaces needs to be improved:

- a) To provide an attractive, direct, safe and convenient **route connecting the River Ness and Caledonian Canal**, but also improve the accessibility of the green spaces for communities, we propose an improved walking/cycling link along the line of Carse Road and Abban Street. This would include a cycle contraflow system at the junction with Telford Street. Widening of the footpath along Carse Road adjacent to the grounds of Merkinch Primary School would enable the provision of an improved planting strip within the school grounds that links in with the overall theme of the network of green spaces and would emphasise the link between the community and the nearby natural spaces.
- b) Improvements are proposed to **walking/cycling facilities along Kessock Road** to improve the quality and perception of cycle and pedestrian routes connecting the South Kessock Pier, Carnac Point and Anderson Street Park with the Black Bridge / Waterloo Bridge. By improving this link we can help to draw people into the area as well as provide a more attractive route to and from the City Centre.
- c) There are two locations where we have identified '**pinch points**' in the network of footpaths and pavements that connect the green spaces. These need to be addressed in order to provide an attractive and integrated network. The pinch points are both adjacent to Muirtown Basin; one which serves as access to the seawall and Nature Reserve, and the other by Carse Road behind the vacant B&Q retail unit. Both sets of steps in these locations need to be significantly improved and ramps provided in order to provide direct access to the green spaces for people of all abilities. Minor green space improvements would be made alongside the new infrastructure.
- d) Appropriate **surfacing** will be used for any new footpaths to a standard that links well with existing high quality footpaths and which permits use by cyclists and pedestrians.
- e) All new **interpretive and directional signage** proposed would provide details of local history, natural environment features/habitats, industrial and cultural and natural heritage. These would be designed and delivered in a consistent way that allows visitors to recognise a clear brand for the network of green spaces.
- f) A number of the access improvements may require the diversion of services - costs to enable such works to take place are included as part of this bid as they are integral to the project delivery.

D. What are the benefits?

The Walks on Water project has potential to deliver significant benefits to those living, working and visiting the City of Inverness, particularly communities surrounding the routes. The project responds directly to the aims and priorities highlighted by local communities through the recent Muirtown & South Kessock Charrette and City Centre consultations. By delivering new and exciting green spaces along these watercourses and improving access to them we will be improving the quality of life for Highlands' most deprived neighbourhoods. The project will therefore make an important contribution to the Highland Single Outcome Agreement, and will directly support the Highland Council led initiative, Carbon CLEVER, which has the vision of a carbon neutral Inverness in a low carbon Highlands by 2025.

Clearly the main attraction for the area will be the green spaces themselves – promoted as a destination in their own right. Provision of interpretive and directional signage at each area of green space will maximise users' understanding of local history, natural environment features/habitats, industrial and cultural and natural heritage. Effective branding, marketing and interactive apps would further enhance people's awareness and perception the area. Education would also play a strong role in changing people's perception of the area. The Council's Ranger Service would work closely with RSPB and Scottish Canals to provide links with local community and charity groups.

E. Funding and delivering

The total costs for the project are £1.25m, for which we will be seeking £500,000 from the Green Infrastructure fund. This will complement Council funding of £750,000 which we will be taking from a variety of sources including our capital programme and Vacant and Derelict Land Fund. Further details of the breakdown of costs and timescales for each element of the project can be provided if necessary. It is also worth highlighting that partner organisations for this bid - RSPB and Scottish Canals - are looking at further funding opportunities that can coincide with this project.

Central to these proposals is the involvement of the community including schools. All the proposals would be developed in close consultation with the community and local interested stakeholders. We anticipate delivering this project in partnership with various groups and agencies namely Scottish Canals, RSPB and local communities and charity groups. The success of the Charrettes and the close working relationship developed with the community has provided the momentum for maintaining local people's involvement in delivering this project.



Appendix 6

Deer management plan

Date written: 10 June 2013

Date revised:

1. Background Information

1.1 Ownerships and contacts

Owner/tenant:	Merkinch LNR Management Group
Agent/contact:	[redacted]
Deer stalker(s):	None
Deer Mgt Group:	Merkinch LNR Management Group
Plan written by:	[redacted]

1.2 Location

Nearest town, village, or feature	Merkinch, Inverness
Grid reference	NH 655 471
Total area of woodland	Approx. 2100m ²
Total area of arable	0
Total area of holding	54.7 hectares

1.3 Description of woodland(s)

Mixed planting of native species including birch, rowan, hazel, oak, hawthorn and cherry. The woodland is dissected by the railway line. There are small clumps of woodland on the other side of the grassy strip. The recently planted woodland has not yet developed its own understory but there are a few woodland plants in places e.g. bluebell, Male Fern and Wood speedwell.

The woodland and scrub communities are in transition between W23 and W24 (NVC classifications)

1.4 History of Woodland Management

The trees were planted in the 1980's and have been left to mature with little intervention. The Merkinch LNR management group have a Biodiversity Management Plan for the site and this dictates that the woodland is managed minimally.

1.5 *Boundary factors*

The woodland area is bounded on the east by the River Ness and the west by the Caledonian Canal. To the north is the Beaully Firth and to the south a grassy ride and some sparse tree plantings, the south by Merkinch housing estate,

1.6 Woodland Areas and features

1.6.1 Designated Areas	In Woodland	Adjacent to Woodland	Not Present	Map
Site of Special Scientific Interest (SSSI)	X	Yes (Beaully Firth shore)		
Special Protection Area	X	Yes (Beaully Firth shore)		
Conservation Area	X	Yes (Ramsar site Beaully Firth shore)	X	
National Park	X	X	X	
National Scenic Area	X	X	X	
National Nature Reserve			X	
Special Area of Conservation		Yes (Beaully Firth water)		
Environmentally Sensitive Area			X	
Area of Outstanding Natural Beauty			X	
Tree Preservation Order			X	
World Heritage Site			X	
Details				
1.6.2 Rare or threatened species	In Woodland	Adjacent to Woodland	Not Present	Map
Red Data Book or BAP species	Bats,	Bottle-nosed dolphins, otters		
Rare or threatened species				
Details				
1.6.3 Habitats	In Woodland	Adjacent to Woodland	Not Present	Map
Ancient semi-natural woodland (ASNW)				
Other semi-natural woodland	Yes			
Plantations on ancient woodland sites (PAWS)				
Semi-natural features in PAWS				
Woodland margins and hedges	Yes			
Veteran and other notable trees	Yes on canal side			
Breeding sites	Yes			
Habitats of notable species				
Unimproved grassland				
Rides and open ground	Yes			
Valuable wildlife communities	Yes			
Feeding areas	Yes			
Lowland heath	No			
Peatlands	No			
Others				

2. Deer - The Current Situation

2.1 What is the history of deer in the area? (E.g. native red herd, long standing fallow population)

1 roe deer buck and 2 does have been recorded using the site since 2005. There were reports of a roe deer doe with calf using the woodland in 2011. One adult deer was killed on the railway line in Oct 2012 and another was killed by a dog in May 2012.

2.2 What species are currently present or are likely to colonise within the next 5 years?

Species	Not present	Present	Likely To be present
Red	X	X	X
Sika	X	X	X
Fallow	X	X	X
Roe		Yes	
Muntjac	X	?	?
CWD	X	X	X
Comments			

2.3 What are the current impacts?

Impact	Minimal	Moderate	Severe
Browsing	Yes		
Fraying	Yes		
Bark stripping	Yes		
Ground flora degradation	Possibly		
Loss of woodland structure			
Deer Road Traffic collisions	Yes with trains		
Crop damage	n/a		

2.4 Deer management

2.4.1 Are deer being culled: (if possible provide annual cull data for the past 3 years as an annex to this plan)

No, but losses have occurred through train collisions, shooting and dog attacks

2.4.2 Apart from daytime, in season culling, are any other methods of management used?
(E.g. chemical protection, fencing, night shooting, please give details)

No

3. Future Management

3.1 Long Term Vision or Policy (e.g. “maintain deer populations in balance with woodland and agricultural interests” or “bring SSSI woodland into improving condition by year XXXX”)

The Biodiversity Management Plan suggests planting up woodland flora e.g. bluebells, primrose, wood anemone, wood sorrel, bugle

3.2 Management Objectives and Strategy (how do you intend to fulfil the Long Term Policy, e.g. “daytime culling together with strategic fencing, to reduce loss of beech regeneration to 40%”)

Objective	Means to achieve objective
Non-deer specific	
Planting woodland flora	Find group to collect seed and plant it.
Deer specific	
Discover and monitor the deer numbers	Find volunteers to count deer population

3.3 Other management objectives that may influence deer management

The site is heavily used by walkers and cyclists. Approximately 25,000 visitors use the paths per year. The deer are a popular sight.

3.4 What are perceived obstacles to achieving objectives?

Finding people keen to count the deer. Recording sightings

3.5 Identify actions for removing obstacles

3.6 Confirm species distribution and minimum numbers present

Roe deer present. We believe there were 1 roe deer buck and 2 does.

3.7 Identify potential collaboration with neighbours

Stephen Wiseman at Caledonian Canal may be able to help with volunteers
University of Highlands and Islands

3.8 Identify carcass handling routes to marketing

Not applicable

3.9 Identify need for training or development

Educating dog walkers to keep their dogs under control on the LNR

5. Monitoring

5.1 How will achievement of the objectives be measured?

Objective or issue	Indicator	Method of assessment	Monitoring period and frequency	Who is responsible	Use of information
Deer numbers/ Density	Animal numbers	A count	Annual	LNR management group	
Impacts					
Cull figures					
Other cull data					
Comments					
Culling is not happening, but recording deer deaths through train collisions, dog attacks etc is useful information.					

6. Health & Safety issues

7. Cost Implications

7.1 One off or capital costs E.g. Deer Fencing, new larder

Not applicable

7.2 Ongoing costs E.g. Ride maintenance

Not applicable

7.3 *Estimated income E.g. rental income*

Not applicable

8. *Appendices (if available)*

Maps

Current grants and designations

Past cull data

Condition assessments

Risk assessments

Useful contact