

Glen Mile mountain bike trail Cumbernauld



greenspace scotland
Scottish Wildlife Trust
Forestry Commission Scotland
Scottish Natural Heritage

July 2011

Executive Summary

The report provides a forecast (or prediction) of the social return from investing in the Cumbernauld Glen Mountain Biking initiative. This provides opportunities for schoolchildren at Abronhill High School to take part in mountain biking on an urban trail as part of the school's physical education curriculum. The report forms part of a series of four Social Return on Investment (SROI) analyses of urban nature sites. The analysis was undertaken during 2010 by greenspace scotland supported by the Scottish Wildlife Trust (SWT).

Social Return on Investment (SROI) provides a principled approach that can be used to measure and account for a broad concept of value. It enables the social, environmental and economic benefits a project delivers to be calculated.

The Glen Wildlife reserve is an area of woodland that was frequently being used by mountain bikers. An increasing number of complaints led SWT, rather than trying to ban mountain bikers, to designate an area within the reserve for mountain biking, and to create graded trails. To support use of the reserve for this purpose, the initiative with schools in the area was established. By managing mountain biking and incorporating it into the overall reserve management plan, it was hoped to increase the participation of young people in the sport, help improve the experience for other reserve users and encourage enjoyment of nature and wildlife for all.

The analysis identified those most affected by the initiative and recorded and valued some of the changes they experienced. These included:

- the local community who use the reserve have a safer place to experience the outdoors
- volunteer mountain bikers who participated in trail gained a sense of achievement from their efforts in developing the trail
- mountain bikers from the general population can use a biking facility in their neighbourhood
- the Friends of Cumbernauld Glen have attained higher public profile
- Abronhill High School PE Department has acquired additional resources
- Abronhill High School pupils have better health and an improved sense of well being
- Scottish Wildlife Trust has more support from local people
- Forestry Commission Scotland have gained a good practice example that can be replicated
- Strathclyde Police can deliver a better services due to improved crime response times

It was found that every £1 invested generated around £3 of benefits (applying a sensitivity analysis, which involved varying the number of pupils, puts the benefits figure in a range from £1 to £3).

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1. Introduction

This report presents a forecast of the social return from investing in the Cumbernauld Glen Mountain Biking initiative which provides opportunities for schoolchildren to take up the sport and increase their physical activity. The report looks at the social value created by the initiative, from the perspective of those for whom the project is making a difference.

The work carried out for this report was undertaken during 2010 by a team of people from greenspace scotland and the Scottish Wildlife Trust.

1.1 Background to the SROI of urban nature sites programme

In 2010, Scottish Natural Heritage (SNH) provided funding support to enable greenspace scotland to test the application of the Social Return on Investment (SROI) approach on four urban nature sites.

The aim of programme was to apply SROI at four urban nature sites and to inform the future application of SROI to urban nature sites. The programme objectives were to:

- test the SROI approach for urban nature sites (refining the methodology as required)
- develop a broader understanding of the wider social outcomes of urban nature sites
- establish a core set of indicators and proxies for valuing urban nature sites
- develop case studies and guidance material to support the wider application of the SROI approach at other sites
- build the skills and capacity of site managers, project partners and SNH to carry out SROI analysis of sites and to enable them to use this to support the case for continued (or new) investment

More information on how these objectives were fulfilled, learning and recommendations from the programme can be found in the programme overview report¹.

This analysis explores the value of a defined activity in the Cumberland Glen Wildlife Reserve. It is important to stress that this SROI report reflects and values only one of the many activities that take place on this site. The cumulative value of the myriad of activities that urban nature sites can offer would be likely to be significantly higher.

The SROI analyses in relation to urban nature sites are part of a more comprehensive body of evidence that has been produced by greenspace scotland on the potential of using an SROI approach to demonstrate the value of a wide range of greenspace activities in different settings. Further information on this, and other SROI developments, can be found at www.greenspacescotland.org.uk/SROI/

1.2 The Glen Mile Mountain Bike Trail

The Glen Mile mountain bike trail in Cumbernauld is the first of its kind opened by the Scottish Wildlife Trust (SWT) in one of the wildlife reserves it is responsible for managing. SWT manages the Cumbernauld Glen Wildlife Reserve for the benefit of wildlife and as a resource for the community. One of the long term objectives identified in the Scottish Wildlife Trust's Cumbernauld Greenspaces Management Plan (2004 – 2014) is the use of greenspaces for recreational purposes, and as a result the mountain bike trail can be considered in the overall management plan for the site.

¹ The Programme Overview report and other project reports in the series can be downloaded at www.greenspacescotland.org.uk/urbannatureSROI/

The mountain bike trail was initially developed as a partnership between SWT, Forestry Commission Scotland (FCS), Cycling Scotland and high schools in the Cumbernauld area. The aim was to respond to complaints about anti-social behaviour in the area caused by the increasing volume of unsupervised and unauthorised biking in the reserve. This was causing concern to local residents who used the reserve for walking and other legitimate purposes.

The trail was constructed during 2007 and opened in August 2008. The trail construction was funded by various partners, including the Forestry Commission Scotland's Scottish Forestry Grants Scheme 'Woods in and Around Towns', Biffa Award, WREN, North Lanarkshire Council and Scottish National Heritage. The initiative contains a variety of trails that are suitable for different skills levels. SWT is responsible for managing and maintaining the trail. Usage is monitored through regular visits by the Reserve Manager and Estates Officer.

This study looks at the use of the trail by a mountain biking initiative set up within Abronhill High School.

1.3 Policy context

Whilst the initial motivation to set up the mountain bike trail and this initiative with schoolchildren arose as a result of complaints from the community, the initiative also consciously addresses a number of strategic policy areas.

Increasing public access to Scotland's natural environments is a policy objective which directly impacts on other policy areas such as improved health and environmental sustainability. At a national level key policies include: Scottish Government's 'Let's make Scotland more active', SNH's 'Enjoying the Outdoors' and sportscotland's 'Out There – policy statement on sport and physical recreation in the outdoors'.

Forestry Commission Scotland has a remit to increase community access to woodlands in order to promote physical activity, improve physical and mental wellbeing and increase the sense of community ownership and respect for woodland (Scottish Forestry Strategy and Implementation Plan, Woods In and Around Towns, Woods for Health). This is based on evidence that visiting woodland on a regular basis can improve physical and mental health by providing opportunities to take exercise and experience nature².

If the local community values its woodlands, then it is more likely that such areas will be protected and enhanced. The importance of looking after natural environments for future generations will be more readily comprehended. Increasing awareness of the importance of the environment amongst young people is one of the aims of the initiative.

Cycling can be used as a way of increasing physical activity levels in young people. This addresses the issue of obesity in the population, which is known to be associated with future long-term health conditions. Promoting cycling, and especially safe cycling to school, is seen as a way of encouraging physical activity and sustainable active travel in younger people.

² Forestry Commission Scotland (2009) 'A valuation of the economic and social contribution of forestry for people in Scotland' [http://www.forestresearch.gov.uk/pdf/fcrp101.pdf/\\$FILE/fcrp101.pdf](http://www.forestresearch.gov.uk/pdf/fcrp101.pdf/$FILE/fcrp101.pdf)

1.4 Social Return on Investment

Social Return on Investment (SROI) provides a principled approach that can be used to measure and account for a broad concept of value.

SROI measures social, environmental and economic change from the perspective of those who experience or contribute to it. It can be used to identify and apply a monetary value to represent each change that is measured. The resultant financial value is then adjusted to take account of contributions from others. In this way the overall impact of an activity can be calculated and the value generated compared to the investment in the activities. This enables a ratio of costs to benefits to be calculated. For example, a ratio of 1:3 indicates that an investment of £1 in the activities has delivered £3 of social value.

Whilst an SROI analysis will provide a headline costs to benefits ratio, it will also deliver a detailed narrative that explains how change is created and evaluates the impact of the change through the evidence that is gathered. An SROI analysis is based on clear principles and progresses through set stages. SROI is much more than just a number. It is a story about change, on which to base decisions, and that story is told through case studies, qualitative, quantitative and financial information.

There are two types of SROI analyses: a forecast SROI predicts the impact of a project or activity and an evaluative SROI measures change that has already taken place. This report is a forecast SROI.

1.5 Purpose of the analysis

The main funders and managers of the project, SWT and FCS, wanted to explore the impact the bike trail had delivered.

SWT wanted to understand what was happening (from their perspective) with the first initiative to incorporate mountain biking into one of their reserves. They wished to show that SWT services were about more than wildlife and that the engagement of people and local communities were vitally important in deciding how their sites could be managed in future.

SWT are attempting to increase their profile and attract more members, particularly families, and so wished to demonstrate the benefits that membership could have for children and young people. The mountain bike trail was seen as a way of attracting a 'non-traditional' audience on to nature sites and encouraging them to enjoy wildlife and nature. SWT also wanted to demonstrate the value of the initiative as a means of gaining support to replicate it in other areas.

FCS are key players in the site and occasionally use it as a venue for events. To ensure its sustainability they need to see that the site has value beyond their core business of harvesting trees. At present, the development of mountain biking on forest trails is not being supported with funding and FCS hoped that this study might provide information to review this decision. FCS is the largest owner of rural mountain bike trails in Scotland; it was thought that comparing usage of an urban site would be interesting. The Glen Mile trail is smaller than rural ones, but possesses the same grades and interpretation as the larger FCS trails. SWT were also interested in exploring whether experience with this trail had led young people to try trails elsewhere and become more involved in the sport.

The audience for this report was therefore seen as SWT management, those working in woodland settings, national bodies with relevant policy objectives, the local authority, police and the local community.

2. Scope and stakeholders

2.1 Project activity

The project activity selected for study was the mountain biking initiative set up within the Physical Education (PE) Department of Abronhill High School. Initially aimed at pupils in S3 to S6, it has now been expanded to cover all years. Funding through FCS allowed the school to purchase: twenty four bikes; associated mountain biking safety equipment and clothing; and, dedicated bike storage pods.

Mountain biking features as an option within the physical education part of the school curriculum. The starting point is to give pupils confidence by enabling them to master some basic biking techniques within the school grounds. The PE department has created facilities which include a slalom course, see-saw and ramps. Two staff in the PE department became qualified as Cycle Leaders through Cycling Scotland. Pupils also receive instruction in bike maintenance, and all staff and pupils receive cycle proficiency training.

The Cycle Leaders take groups of up to 24 pupils out on to the trail during their regular PE sessions, and sometimes after school. The trail is only a five minute bike ride away from the school. The trail is designed to be particularly appropriate for the schools programme, as it has 1400m of blue grade trail, and teaching staff can have a clear view over the whole site when they are out with pupils.

2.2 Scope

This study is a forecast of the value created by the Cumbernauld Glen Mountain Bike initiative. Although originally intended to be an evaluation of the social return, the task of collecting and collating large amounts of additional data was deemed to be too demanding within the resources available.

The analysis is based on the period August 2009 to July 2010. The original intention was to look at the three years from 2007 to 2010, which covered the construction phase and was consistent with the original decision to do an evaluation. However, it was decided it would be better to focus on one year during which the impact on pupils could be properly assessed by direct contact. The period chosen includes a complete whole school year and also represents the second year of operation of the bike trail which was opened in August 2008.

Whilst other high schools in the area have been involved in the initiative and/or are developing their own projects, it was decided to exclude the other schools and focus just on the Abronhill pupils' use of the trails.

2.3 Stakeholders and stakeholder engagement

The analysis focused on nine stakeholder groups:

- the local community who use the reserve
- volunteer mountain bikers who participated in trail
- mountain bikers from the general population
- Friends of Cumbernauld Glen
- Abronhill High School PE Department
- Abronhill High School pupils
- Scottish Wildlife Trust
- Forestry Commission Scotland
- Strathclyde Police

Other stakeholder groups were identified during the process of stakeholder analysis but were not included. The reasons for these decisions are described in Appendix 1. The original stakeholder list covered five groups/organisations; during the stakeholder engagement process others were identified who appeared to experience material change.

Stakeholders were involved in the analysis through methods agreed with SWT and greenspace scotland at the initial scoping meeting in March 2010.

SWT's Reserve Manager was responsible for engaging with stakeholders, supported by the greenspace scotland SROI Project Manager. All stakeholders were initially contacted by email and invited to attend one-to-one scoping sessions to discuss their participation in the project. Stakeholders also received a draft document containing details of potential outcomes, a description of the engagement process and possible indicators. The use of initial emails to engage stakeholders helped to establish the sincerity and interest of the stakeholder. Their willingness to accept the invitation to participate helped to make judgements in relation to the materiality, or relevance, of their outcomes.

Each stakeholder (or representative) met with the Reserve Manager in an informal and relaxed scoping exercise. This was an opportunity to have a general discussion about the mountain bike trail and the outcomes arising for each stakeholder. Sessions lasted about one hour during which notes were taken by the Reserve Manager and returned by email to the stakeholder for further comment and editing.

The pupils at Abronhill High School who had been involved in the mountain biking were surveyed by the Reserve Manager. 10 pupils were interviewed for around 5 minutes each, using a set of questions developed by the SWT Reserve Manager.

The engagement process can be summarised as follows:

Stakeholder	Engagement details	Follow up
Volunteer mountain bikers, mountain bike users and Friends of Cumbernauld Glen	Met with Reserve Manager in June 2010	
Abronhill High School PE department	Meeting in June 2010	Follow on email correspondence
Abronhill High School pupils	Surveyed in June 2010	
Police	Interviewed in June 2010	Follow on email correspondence
Forestry Commission	Meeting in April 2010	Invited to a follow up meeting with other stakeholders and follow on email correspondence
Local residents, reserve users and mountain bikers	Surveyed as part of a local public consultation event for Cumbernauld Glen Reserve held in July 2010	
Scottish Wildlife Trust	Interviewed in July 2010	Follow on email correspondence

3. The theory of change from the perspective of the different stakeholders

The Cumberland Glen Wildlife Reserve is an area of woodland that was frequently being used by mountain bikers. An increasing number of complaints led SWT, rather than trying to ban mountain bikers, to designate an area within the reserve for mountain biking, and to create graded trails. To support the use of the reserve for this purpose, the initiative with schools in the area was established. By managing mountain biking and incorporating it into the overall reserve management plan, it was hoped to increase the participation of young people in the sport, help improve the experience for other reserve users and encourage enjoyment of nature and wildlife for all.

3.1 Local community

In 2005 the local community's opinions were sought about the Cumbernauld Glen Wildlife Reserve. Young people wanted to see a BMX trail in the Glen, as they disliked the fact that there was nothing to do there. However, residents reported a dislike of the unsupervised mountain biking that was going on at the time. By the time of the public event in 2010, these perceptions had changed.

By restricting the use of mountain bikes to designated trails, and clearer signage showing where bikers could be expected to appear and where it is best to walk, the community can feel safer in using the reserve, and enjoy it more. As SWT counter statistics show, usage of the trails and the reserve as a whole has increased since the survey in 2005, adding to a greater sense of security. More families can cycle together, and have access to a better local facility.

There are, however, still some local residents who do not support mountain biking and who feel negative about the initiative. Dog walkers particularly report a dislike of mountain biking.

3.2 Friends of Cumbernauld Glen

This community group was formed to support the reserve and help with aspects of reserve management on a volunteer basis. The existence of the bike trail and the school initiative has raised awareness of their activities and their profile.

On a less positive note, the success of the mountain bike trail has diverted attention away from other aspects of their work in the reserve. As a result they have found it difficult to raise funds. This was acknowledged to be associated with other factors, and not just the bike trail.

3.3 Volunteer mountain bikers

This group have been involved in setting up and helping to support the trails. A great sense of pride and achievement has been experienced by the volunteers, and they reported that "*it had turned out much better than anticipated*". The trail has become a venue for teaching biking skills and helping parents learn how to maintain bikes and make sure they are safe. The feedback from users to volunteers has been very positive, which has added to their sense of achievement.

From the perspective of the volunteers, they feel that they have helped to encourage a more responsible mountain bike culture within the reserve.

3.4 Mountain bikers

Although the trail is small, it is very accessible from Cumbernauld. It has the attraction for local mountain bikers that they can 'pop out' for a quick run that is on their doorstep, rather than having to travel elsewhere.

3.5 Abronhill High School PE Department

The PE Department has been able to expand its curriculum to include a new activity that has a certain 'cachet' amongst young people. They report that mountain biking is a popular choice with pupils. Pupils are keen to participate in biking activities which have allowed them to develop their skills and confidence.

The PE department has been able to offer more choice of activities in their curriculum. The nature of the partnership with SWT has enabled the school to get additional resources, some from external sources, to support the physical education curriculum.

Mountain biking, from their perspective, has led to improved mental wellbeing amongst pupils. This was recognised by the 2009 HM Inspectorate of Education (HMIE) report which highlighted the contribution of the mountain biking initiative to the improved health and wellbeing of pupils. HMIE now actively promote the mountain biking project as an example of good practice.

The school's profile has been raised as a result of the publicity and the HMIE report.

The school also believes that the mountain biking activity could lead to safer and more responsible cycling to school. The school had identified that many pupils lacked comprehension of basic road safety, however, they have found no evidence as yet that the mountain bike trail has resulted in more cycling to school or in more responsible cycling. There have been a number of different initiatives to encourage walking and cycling to school. The school noted that pupil behaviour may be very good while supervised at school (e.g. helmets are worn) but this may not be transferable to private cycling activities. Although the pupil survey suggested that half of all pupils now wore a helmet outside of school.

Staff had raised the concern that parents and the wider community might perceive the school to be focused on mountain biking to the detriment of other sports. Although this was a concern initially, it proved unfounded and mountain biking has now been successfully integrated.

3.6 Abronhill High School pupils

The pupil survey suggested that participation in the mountain biking option had led them to learn new skills which have increased their confidence. They reported that they felt physically fitter, and stated they were more safety conscious and as a result had fewer accidents.

The pupils indicated that they were proud to be part of a school which was the only one in Scotland doing this.

Some of the anticipated outcomes for pupils did not transpire: pupils did not report feeling happier as a result of the mountain biking; did not think they were more responsible citizens; and, did not appreciate or enjoy nature and wildlife more.

3.7 Police

Strathclyde Police have cycling police who regularly use the site for various purposes. Community Police officers participate in the 'cycle cop' scheme which has proved very popular. The trails are used for police cycling training and to improve skills in off-road cycling. Approximately twenty police officers are trained each year.

The cycle cops enter the reserve frequently to police anti-social behaviour in Cumbernauld Glen as a whole, and report they can now police a larger area in less time. They are now able to respond to complaints or reported incidents in significantly less time than previous foot patrols. Underage drinking is the number one activity which results in anti-social behaviour actions.

The police believe that the trail is a fantastic facility for local youngsters, particularly those who are at risk of being involved in anti-social behaviour. The cycle cops are able to signpost young people towards the trail, and highlight that it provides "*something to do in the area*". This approach provides more positive engagement opportunities and police report that their relationship with local youngsters has been enhanced because of the trail.

3.8 Forestry Commission Scotland

The mountain bike trail, and the project with Abronhill High School has, from the perspective of Forestry Commission Scotland, given them experience that they will use to replicate aspects of the initiative in other areas.

They have been able to run more events using the trail, which combined with the community perception of improved safety, has encouraged more people to access the reserve site. For a national body with a remit to increase public access to woodland and nature, this is an important outcome.

They particularly see the schools project, which encourages young people to enjoy nature and to associate natural environments with pleasure, as a way of ensuring in future that such environments are treated with more respect. It should, however, be noted that the pupils involved in the initiative did not identify benefits directly associated with increased knowledge, awareness of and pleasure in the environment as a benefit. This apparent contradiction merits further exploration.

3.9 Scottish Wildlife Trust

SWT report that the perception of the organisation has been enhanced and diversified – there is an understanding that SWT is not just about nature and wildlife. This has raised the organisation's profile; it was hoped this would be reflected in increased membership in future years.

The project has also increased local support for the SWT's wildlife reserve. By recognising, addressing and resolving complaints, the organisation has been able to demonstrate that it is listening to local residents. As a result its relationship with local people and volunteers is much improved; this will make it easier in the long run for it to promote the community benefits of an urban wildlife reserve.

Staff in SWT have benefited from learning new skills arising from the need to manage the bike trail.

4. Inputs and outputs

4.1 Investment (inputs)

There are three main inputs for the initiative: direct funding during the period; apportionment of SWT staff time and training; and, apportionment of the cost of the trail and the equipment to support the activity.

None of the other inputs were valued. For example, staff time at Abronhill, if not used to support the project, would have been applied to teaching pupils in other areas, and so there has been no additional input from them.

The funding was provided as follows:

Stakeholder	Description	Amount
Forestry Commission Scotland	Construction of mountain bike trail through WIAT fund, depreciated over 20 years to find input for one year	£1,751
Other funders	Construction of the trail and signage, depreciated over 20 years to find input for one year	£5,251
Forestry Commission Scotland	Provision of bikes and equipment funded through the Forest Development Fund, depreciated over 3 years to find the input for one year	£11,333
Scottish Wildlife Trust	Estimated apportionment from SWT of staff time and training associated with the initiative during the year	£7,496
Total inputs for the year 2009/10 under study		£25,831

4.2 Outputs

The outputs describe the activities delivered as a result of the inputs, which then lead to change (or outcomes) for each stakeholder. During the study, it was found to be particularly difficult to collect information from certain stakeholders, especially the school, and accordingly estimates had to be used.

The outputs identified are:

Stakeholder	Relevant outputs
Local community	23,000 estimated visits to the site in 2010; 6,200 more than in 2009
Friends of Cumbernauld Glen	5 local and national press articles published
Volunteer mountain bikers	Weekly bike maintenance sessions offered by 5 volunteers
Mountain bike users	44 regular mountain bikers using the trail and 2,000 additional mountain biking visits in 2010 compared to 2009
Abronhill High School PE department	2 members of staff qualified as Cycle Leaders, an estimated 5,472 pupil hours of activity in the school year

continued

Stakeholder	Relevant outputs
Abronhill High School pupils	An estimated 125 pupils of all ages gain access to mountain biking and learn how to maintain bikes
Police	20 police cycle trainees per annum using the site; an estimated 14 hours of additional policing through cycling each week
Forestry Commission Scotland	2 managed events, a promotional DVD circulated 23,000 estimated visits to the site in 2010; 6,200 more than in 2009
Scottish Wildlife Trust	116 hectares of the reserve protected from mountain biking, 23,000 estimated visits to the site in 2010; 6,200 more than in 2009

5. Outcomes and valuation

The results of the stakeholder engagement and information collection are represented in the impact map information in Appendix 1.

5.1 Outcomes evidence

The data collection was particularly challenging, and as a result, limited evidence was found for some outcomes that were reported by stakeholders. This, combined with some difficulty in obtaining output data, resulted in the decision to change the study into a forecast.

The outcomes which have been derived from the stakeholder engagement and included in the analysis for the different stakeholders are detailed below, together with the data that measured the outcome or allowed for a forecast to be made (the indicators). Outcomes in red are negative outcomes. Those outcomes excluded due to lack of data are listed in Appendix 1.2.

Stakeholder	Outcome	Outcome Indicator	Source of quantities estimate or data
Local community	Improved feeling of security within the site as it is busier	Number of additional visits estimated to the site	SWT counter
		More visits by SWT staff, police cyclists and Council staff to the trail as a result of increased use	SWT/Police/North Lanarkshire Council
	Having a family and child-friendly facility in the area and more opportunity for fun	Number of additional cycling users	Stakeholder interviews and results from the public consultation event
	Some local residents resent the mountain biking activity as there are still conflicts between users	Number of additional incidents reported	School stakeholder interview
Volunteer mountain bikers	Pride in self and a sense of achievement	Volunteers completing the cycle leader course	Stakeholder interviews
Mountain bikers	Local access to take part in their interest/sport	Larger number of regular mountain bike users	Stakeholder interviews and SWT counter statistics
Friends of Cumbernauld Glen	Raised profile	Number of features in press	Stakeholder interviews
	Negative impact on FCG's wider aims as a result of the focus on the mountain biking	Loss of SWT staff: Community Woodland Officer	Stakeholder interviews

Stakeholder	Outcome	Outcome Indicator	Source of quantities estimate or data
Abronhill High School PE department	Happier pupils who have greater health and wellbeing	HMIE inspection report identified the Mountain Bike Trail as contributing particularly to health and wellbeing	HMIE website
	PE Department has had more resources to run a new activity and offer more choice	The amount of new resources brought into the PE Department	Stakeholder interview
	Profile of the school is raised	The Mountain Bike Trail recognised by HMIE as a Good Practice example	HMIE website
		Number of features in educational publications	Stakeholder interview
Abronhill High School pupils	Improved confidence through acquiring a new skill	Number of pupils who report cycle practice boosted their skills and confidence	Pupil survey
	Feeling physically fitter	Number of pupils who report using the bike trails outside of school	Pupil survey
		Number of pupils who cycle to school	Pupil survey
	Feeling proud of being part of a school which is the only school in Scotland that provides mountain biking	Number of pupils who reported being proud of the school in introducing mountain biking	Pupil survey
		Number of pupils who report feeling a sense of ownership for the bike trails	Pupil survey
	Fewer accidents as pupils are more safety conscious	Number of pupils who wear a cycling helmet outside of school supervision	Stakeholder interviews
Police	More opportunities for staff training	The number of hours Glen trails are used for community cycle police training	Stakeholder interview
	More able to respond to anti-social behaviour	Police report that they can cover a larger area in a smaller period of time compared to foot patrols	Stakeholder interview
Forestry Commission Scotland	Good practice demonstration scheme to replicate in other areas	New project being developed in Edinburgh by City of Edinburgh Council which drew on the Glen Mile trail experience and is likely to go ahead as a result of the Glen Mile Trails experience	Stakeholder interview

Stakeholder	Outcome	Outcome Indicator	Source of quantities estimate or data
Forestry Commission Scotland (continued)	Young people associate natural environments with pleasure	Number of pupils who report using the bike trails outside of school	Pupil survey
	Greater opportunities to run events using the reserve leading to more people accessing woodland	Number of people using the site	MBT counter statistics
Scottish Wildlife Trust	Staff have learnt new skills	Number of new Health & Safety and mountain biking skills learned	SWT records
	Perception of SWT being about more than wildlife and diversifying the organisation's profile	Number of press articles expressing positive attitude towards the SWT's Cumbernauld Glen Wildlife Reserve	SWT records
		Number of high profile visits to the site	SWT records
		Number of other professionals visiting the Glen Mile Trails	SWT records
	Increased local support for the urban nature reserve	Engaging new volunteers with the site	FCG stakeholder interview
	Pupils are not aware that SWT owns and manages the site	Number of pupils who were unaware of the SWT	Pupil survey

Further information on how estimates were derived from the information collected is contained in Appendix 1.3.

5.2 Valuation

SROI uses 'financial proxies' to represent the value of outcome for the stakeholders. Some represent potential cash savings or are represented by unit costs of providing services. Others are less tangible and represent the values that stakeholders might place on the outcomes. Negative outcomes are also valued using financial proxies.

As this is a forecast, values have been derived from other relevant studies or from research. In an evaluation study, stakeholders would be asked to give their views about how important different outcomes are, and how best they might be valued. It has not been possible in this study to get many valuations directly from stakeholders; this is another source of variance in the results.

Scottish Government has supported the development of a databank of indicators and financial proxies for use in SROI studies; this analysis has drawn on the database where appropriate.

The valuation methods for each outcome are detailed in Appendix 1.4.

6. Social return forecasting and sensitivity

6.1 Duration and drop off

Before the calculation can be finalised a decision has to be made about how long the changes produced by the Glen Mile mountain biking initiative would last. SROI looks at how long some of the changes would last and projects the value of outcomes into the future. The question to be answered is: 'if the activity stopped tomorrow, how much of the value would still be there?'

Since the activity is the use of the trail by one set of users for whom it has been developed i.e. the school, not all of the outcomes would disappear if the initiative stopped because the trails would still exist. Mountain bikers and the police would still use the trails, the volunteers would still be involved, and the community would still use the facilities, but the school's outcomes would disappear as would those of SWT, the Friends of Cumbernauld Glen and most of Forestry Commission Scotland's.

Where some outcomes would last into the future, it has been assumed that this would be for five years, as the trail would last for at least this length of time. Since this is an assumption, it has been tested out in the sensitivity analysis below.

Outcomes which will continue to have a value in future cannot be expected to have a value at the same level for each of these five years and so a 'drop off' has been assumed, where value is reduced each year. There is little research to give a more accurate figure for drop off and so it has been assumed to be 10%. This assumption has been tested in the sensitivity analysis.

Appendix 1.6 sets out the duration and drop off assumptions.

6.2 Reductions in value to avoid over-claiming

As well as considering how long changes will endure it is necessary to consider if the recorded change might have happened anyway, who else contributes to achieving the outcome and whether the activity displaced other outcomes. The aim is to be realistic about the benefits provided and recognise that the value created by the Glen Mile mountain biking initiative is not solely down to the activity and that other factors have to be acknowledged. SROI does this by reducing the value calculated for each outcome by a percentage.

6.2.1 Deadweight

The reduction for deadweight takes account of the fact that a proportion of an outcome might be achieved anyway without intervention. For example, the fitness outcome for school pupils has a high deadweight because the PE department would offer something to replace mountain biking. The detailed assumptions about deadweight are contained in Appendix 1.5.

6.2.2 Attribution

Attribution is the recognition that for each outcome, there are external factors which influence its achievement. For example, the increased feeling of safety in using the site experienced by the local residents may be created by anti-social behaviour initiatives in the area that are not connected to the school's initiative. The detailed assumptions about attribution are contained in Appendix 1.5.

6.2.3 Displacement

Displacement applies where the achievement of one outcome has been at the expense of another outcome or to the detriment of another stakeholder. There are two areas where displacement could apply.

One is through the allocation of a part of the nature reserve to mountain biking and the increased traffic in the reserve that this generates. This was identified as a potential negative outcome for some residents and so has been already taken into account.

The other is whether anti-social behaviour discouraged by the existence of the trail, which has permitted better access by police and the increased use of the trail by other users, might have encouraged anti-social behaviour to shift into another area. The interview with the police explored this issue, and it appears that this has not happened. The impact of the trail on anti-social behaviour in general was not apparent, although it could be having an impact on the behaviour of the individual pupils. This potential source of displacement has therefore been ignored because it is not significant.

6.3 Calculation of social return

The impact map in Appendix 1.7 shows the values for each outcome for each stakeholder, taking into account deductions to avoid over-claiming. These individual values have been added together and then compared with the investment in the Glen Mile mountain bike initiative detailed in section 4.1 above.

The results show a social return on investment of around £3 for every £1 invested based on the assumptions made set out above.

6.4 Sensitivity analysis

The forecast is based on some critical and sensitive assumptions; the key one being the number of pupils participating in the initiative over the year. The school were not in a position to provide these figures and so the number of pupils was estimated. The sensitivity analysis shows that the social return varied considerably depending on the pupil numbers. Other significant assumptions were also tested in the sensitivity analysis below:

Factor	Assumption	Variation	Result
The number of pupils who use the Mountain Bike Trail	125 pupils access MBT option	50% i.e. 63 pupils participate	£1.27
		20% i.e. 25 pupils participate	£0.51
Break even quantities		60% fewer i.e. 50 pupils participate	£1.00
The percentage of outcomes which would happen anyway (deadweight)	29%	50%	£1.95
The percentage of the outcomes which are produced by other factors (attribution)	39%	75%	£0.94
		50%	£1.88
The length of time which outcomes last for (duration)	A few endure	None endure	£1.90
The level of valuations that were used	As forecast	Financial proxies are 50% of the value assumed in the forecast	£1.27

If pupil numbers were 24, i.e. the numbers of pupils participating were restricted to the number of bikes available, and the same pupils took the option over the school year, then the return on every £1 invested would only be £0.50.

The 'break even' number of pupils, who need to participate in the activity in order for the investment to be 'repaid', i.e. for the SROI ratio to be £1, was calculated to be 50 pupils.

Applying sensitivity adjustments to key assumptions produces a range for the SROI ratio of between £1 and £3 for every £1 invested.

7. Discussion and recommendations

The results show how dependent the SROI analysis is on the active engagement of stakeholders. It also highlights the importance of asking the right questions of stakeholders, i.e. to focus on what changes rather than what the activity is.

In certain key areas of this analysis, outcomes were assumed on the basis of reports from other stakeholders on behalf of pupils which may not stand up to scrutiny e.g. physical fitness of pupils and the impact on cycling safety.

The lack of valuations given directly by certain stakeholder groups and the difficulties of getting data in some key areas, raises some concern about the analysis and the results. The SROI ratio would be significantly affected if stakeholder valuations were much lower or higher than estimated here. This has been addressed, to an extent, in the sensitivity analysis.

This is a forecast SROI that has utilised, where available, data to provide guidance, estimates or predictions. If the school could provide basic evaluation information and some stakeholders, such as pupils and the local residents, were surveyed about their outcomes in more depth, this would significantly improve the reliability of the report.

It is reasonable to say that this forecast suggests there would be a positive return from the Glen Mile Mountain Biking initiative, as long as enough pupils participate. If every bike is used by at least 2 pupils over the school year, then there will be a positive social return.

Recommendations

- R1: This report provides a framework to assist the further development and evaluation of the initiative
- R2: Procedures to maximise the use of bikes by as many pupils as possible should be identified

Appendix 1: Audit trail and impact map information

1.1 Stakeholders identified who were included or excluded

Stakeholder	Included/ excluded	Rationale
Local community	Included	Expected to be beneficiaries of the trail by making use of it. 2005 survey showed that the local community did use the reserve but had issues with mountain bikers, which the trail was to resolve and so outcomes were expected
Volunteer mountain bikers	Included	Involved in helping the local community to use the trail by providing assistance and encouragement; this was expected to provide outcomes
Local mountain bikers	Included	Access to a local facility was expected to impact on the group
Friends of Cumbernauld Glen	Included	A major supporter of the trail and so expected to experience outcomes
Abronhill High School PE department	Included	The main leader of the activity and so expected to have significant outcomes
Abronhill High School pupils	Included	The main beneficiaries of the activity and so expected to experience outcomes
Police	Included	One of the aims of the activity was to reduce anti-social behaviour in the area and so outcomes were expected for the police
Forestry Commission	Included	Major funder with relevant policy objectives
Scottish Wildlife Trust	Included	Reserve manager who promoted the project
North Lanarkshire Council	Excluded	It was difficult to judge whether NLC was a stakeholder or not. The Education department was represented in the analysis by the school and provided information about their safe cycling initiative. The Biodiversity Officer was contacted about the potential impact on biodiversity but the study did not find any evidence for negative or positive effects on biodiversity and so this was judged not to be material
UPM Tillhill	Excluded	Company which managed the construction of the trail. Had been thought that the experience here could have enabled the company to gain other contracts. The company was offered the opportunity to comment but did not do so; assumed impact was not material
Bike retailers	Excluded	It was thought that the trail could have led to increased bike sales. Halfords were contacted. High School pupils considered Halfords to be their main retailer for mountain bikes. Staff were aware of the trail and interested in cooperation if their head office agreed; this did not materialise. No information was available to assess any increase in sales
Local Councillors	Excluded	Contacted and invited to comment. One had made a formal representation to SWT on behalf of a constituent. Offered insight into the views of local community but no further contribution offered, which indicated impact was not material

1.2 Outcomes identified but not measured

During the study, some outcomes were identified which were not included in the final impact map:

Stakeholder	Outcome	Indicator and proposed method of measurement	Rational for exclusion
Local community and the police	Reduction in local anti-social behaviour from young people and more responsible young people	Change in police call outs and complaints from the area	Crime statistics for Abronhill, The Village, Kildrum and Wardpark South Industrial Estate could be available but were not provided and so not included. The police, as a stakeholder, thought the impact was immaterial
Local community	Having a family and child friendly facility in the area and more opportunity for fun	Number of parents participating in Doctor Bike training sessions	No information
Abronhill High School PE department	Negative perception that the school just does mountain biking and no other sports	Stakeholder interview	Was an issue early on but ' <i>has now settled down</i> ' and mountain biking has been successfully integrated into the PE curriculum and so not included
Abronhill High School pupils	Pupils are happier	Through self-reporting from survey	No evidence from the survey
Scottish Wildlife Trust	Able to attract new members		No evidence of any impact provided
	Less damage to the wildlife reserve and its wildlife		Not thought to be material by the stakeholder
Forestry Commission Scotland	Young people more aware of their responsibilities to take care of such environments		No evidence from the pupil survey

1.3 Information on quantities

Stakeholder	Outcome	Explanation of estimates of quantities
Local community	Improved feeling of security within the site as it is busier	The SWT counter statistics (stats) were compared to the estimated numbers accessing the reserve in 2008/09. The difference in visits was 6,200 over the year. SWT warn that counter stats are not 100% reliable, which is why quantities were varied in the sensitivity analysis.
	Having a family and child friendly facility in the area and more opportunity for fun	SWT have counter stats for the MBT, which suggests an additional 2,000 visits per year (assuming that the counters double count 3 out of 4 visits). In a 2010 survey with 34 responses, 12% reported that they used the site for cycling, as opposed to reports by only 2% of young people in the 2005 survey that one of the things they liked about the Glen was 'cycling'. This implies that out of 2,000 recorded users, 200 (10%) additional users could be expected to report that they were now making more use of the MTB.
	Some local residents resent the mountain biking activity as there are still conflicts between site users	The numbers were reported to be a small minority. SWT report a small number of incidents but likely to be higher as staff are not on site all the time. Estimated it is 5% of the additional people (estimated) as using the MBT, which was 200, and so assume 10 incidents.
Volunteer mountain bikers	Pride in self and a sense of achievement	There were 5 volunteers reported by SWT and confirmed with the stakeholder
Mountain bikers	Local access to take part in their interest/sport	SWT gave figures for regular users, based on site staff reports, of 44 regular users
Friends of Cumbernauld Glen	Raised profile	2 press features reported
	Negative impact on FCG's wider aims as a result of the focus on the mountain biking	Loss of one member of staff, which was not wholly down to the activity
Abronhill High School PE department	Happier pupils who have greater health and wellbeing	The school roll was 473 at beginning of 2009 and 515 in 2010, and so assumed 500 pupils, of whom 25% access the mountain biking, i.e. 125
	PE Department has had more resources to run a new activity and offer more choice	Stakeholder direct information
	Profile of the school is raised	Stakeholder direct information

Stakeholder	Outcome	Explanation of estimates of quantities
Abronhill High School pupils	Improved confidence through acquiring a new skill	7 out of 10 pupils in the survey reported this, and so assume the percentage holds across the whole estimated number of pupils (125) gives 88
	Feeling physically fitter	8 out of 10 reported feeling this, but at a limited level, and so assumed 40% would experience this out of 125 pupils
	Feeling proud of being part of a school which is the only school in Scotland that provides mountain biking	All pupils reported feeling this and so assume all 125 participants will feel this
	Fewer accidents as pupils are more safety conscious	50% of pupils reported they always wore a helmet
Police	More opportunities for staff training	Police reported 20 trainees participated in cycle training
	More able to respond to anti-social behaviour	Assumed it would require 2 CCTV cameras to cover the same area of the mountain bike trail
Forestry Commission Scotland	Good practice demonstration scheme to replicate in other areas	FCS had used the experience to help set up one other project in Edinburgh
	Young people associate natural environments with pleasure	8 out of 10 reported feeling this but at a limited level and so assumed 40% would experience this out of 125 pupils
	Greater opportunities to run events using the site leading to more people accessing nature sites	The SWT counter stats were compared to the estimated numbers accessing the reserve in 2008/09. The difference in visits was 6,200 over the year. SWT warn that counter stats are not reliable, which is why quantities were varied in the sensitivity analysis
Scottish Wildlife Trust	Staff have learnt new skills	SWT provided detailed information
	Perception of SWT of being more than about wildlife and diversifying the organisation's profile	SWT provided detailed information
	Increased local support for the urban nature reserve	There were 5 volunteers reported by SWT and confirmed with the stakeholder
	Pupils are not aware that SWT owns and manages the site	9 out of 10 pupils were not aware - applied to 125 participants, gives 113

1.4 Financial proxies

Stakeholder	Outcome	Description of financial proxy	Value	Source
Local community	Improved feeling of security within the site as it is busier	The recreational value of forests to adults based on 'willingness to pay' per visit	£1.11	Forestry Commission Scotland: A valuation of the economic and social contribution of forestry for people in Scotland http://www.forestryresearch.gov.uk/pdf/fcrp101.pdf/\$FILE/fcrp101.pdf
	Having a family and child-friendly facility in the area and more opportunity for fun	Average family spend on museums, zoos, theme parks, houses and gardens	£93.60	Family Spending Survey 2009, Table A1, category 9.4.2.3.
	Some local residents resent the mountain biking activity as there are still conflicts between users	Loss of amenity represented by the average family spend on museums, zoos, theme parks, houses and gardens	-£93.60	Family Spending Survey 2009, Table A1, category 9.4.2.3.
Volunteer mountain bikers	Pride in self and a sense of achievement	Cost of a course that delivers personal empowerment	£199.00	NLP-based course at http://www.thelearningpath.co.uk/courses.php
Mountain bikers	Local access to take part in their interest/sport	Avoided cost of car journeys to the Carron Valley mountain bike trail, 13 miles from Cumbernauld, five times per week	£2,600.00	http://www.forestry.gov.uk/forestry/infd-6p6kbl
Friends of Cumbernauld Glen	Raised profile	Estimated cost of a PR agency to place the same articles	£2,500.00	Various internet sites
	Negative impact on FCG's wider aims as a result of the focus on the mountain biking	Estimated value of a member of staff, based on £25,000 pa salary	-£30,000.00	Estimate based on jobs at www.goodmoves.org.uk

Stakeholder	Outcome	Description of financial proxy	Value	Source
Abronhill High School PE department	Happier pupils who have greater health and wellbeing	The value of three fewer half hour visits to the guidance unit by each pupil during the school year	£77.14	Guidance Teacher average salary for Cumbernauld area is £54,000 pa from http://www.salarytrack.co.uk (assumes 30% on-costs)
	PE Department has had more resources to run a new activity and offer more choice	Value of financial assistance to the PE Department	£11,333.00	Stakeholder interview
	Profile of the school is raised	Estimated value of a PR campaign to achieve a similar effect	£5,000.00	Various internet sites
Abronhill High School pupils	Improved confidence through acquiring a new skill	50% of average spend on birthday parties and treats for children to give them a sense of love and security which leads to confidence	£91.00	Average spend on a birthday party in 2006 was £182 at http://www.myfinance.co.uk/cut-your-bills/news//parents-spend-1-25bn-on-children-s-parties-\$298248.htm
	Feeling physically fitter	Cost of Go Trax - commercial mountain biking	£25.00	www.go-trax.co.uk
	Feeling proud of being part of a school which is the only school in Scotland that provides mountain biking	Value of a gift voucher for school achievement	£10.00	estimate
	Fewer accidents as pupils are more safety conscious	Cost of a beginner's mountain bike skills course	£99.00	http://scottishmountainbikeguides.com/mountain-biking-skills-courses/mountain-biking-beginner-skills
Police	More opportunities for staff training	Cost of a beginner's mountain bike skills course	£99.00	http://scottishmountainbikeguides.com/mountain-biking-skills-courses/mountain-biking-beginner-skills

Stakeholder	Outcome	Description of financial proxy	Value	Source
Police (continued)	More able to respond to anti-social behaviour	Average cost per camera of installing CCTV, and associated costs	£4,330.00	Home Office Research Report 292 'Assessing the impact of CCTV' 2005 at http://rds.homeoffice.gov.uk/rds/cctv2.html
Forestry Commission Scotland	Good practice demonstration scheme to replicate in other areas	Value of funding put into Abronhill MBT	£11,333.00	Stakeholder and funding documents
	Young people associate natural environments with pleasure	Value of adult membership of an environmental organisation	£35.33	Average cost of adult membership for SWT, John Muir Trust and National Trust for Scotland
	Greater opportunities to run events using the site leading to more people accessing nature sites	The recreational value of forests to adults based on 'willingness to pay' per visit	£1.11	Forestry Commission Scotland: A valuation of the economic and social contribution of forestry for people in Scotland http://www.forestryresearch.gov.uk/pdf/fcrp101.pdf/\$FILE/fcrp101.pdf
Scottish Wildlife Trust	Staff have learnt new skills	Cost of an intermediate mountain bike skills course	£99.00	http://scottishmountainbikeguides.com/mountain-biking-skills-courses/intermediate-skills
	Perception of SWT of being more than about wildlife and diversifying the organisation's profile	Estimated cost of a PR agency to place the same articles	£535.71	Various internet sites
	Increased local support for the urban nature reserve	Value of volunteer time provided for two hours per week	£1,000.00	Median wage for North Lanarkshire from Annual Survey of Hours and Earnings 2010
	Pupils are not aware that SWT owns and manages the site	Potential membership income for Scottish Wildlife Trust lost	-£18.00	Watch membership for 5yrs to 14 years at http://www.swt.org.uk/join/

1.5 Deductions to avoid over-claiming

Stakeholder	Rational for deadweight	Rationale for attribution
Local community	25% Local community outcomes were dependent on the existence of the MBT but some of the outcomes might have been achieved by other means. The outcome of 'having a family and child-friendly facility in the area and more opportunity for fun' was judged to be wholly dependent on the MBT	50% This was an estimate; it assumed that the community outcomes were influenced by a range of factors, with the MBT being only 50% responsible
Volunteer mountain bikers	0% Their outcome was judged to be wholly dependent on the existence of the MBT	25% Their outcome was shared with other parents and users of the trail
Local mountain bikers	95% Their outcomes were likely to be achieved due to the existence of the reserve and the fact that many regular users were biking 'wild' already	95% Most of the outcome is down to the trail, as opposed exclusively to the school's initiative
Friends of Cumbernauld Glen	25% estimated for the positive outcome 0% for negative outcome	25% estimated for the negative outcome and 95% for the negative outcome because the loss of the staff member was as a result of a funder's decision - very little of which was attributable to the school's initiative
Abronhill High School PE department	75% estimated for the health and wellbeing outcome because if they hadn't been running the MBT initiative they could have been running other initiatives which delivered the same outcome. For the others, assumed 0% deadweight as the outcomes were dependent on running the initiative	75% estimated for the health and wellbeing outcome, as parents and others may have more of an influence 50% for the others, as these would be shared with the Council as a whole, who were not an included stakeholder
Abronhill High School pupils	0% for confidence because this was specific to the activity 75% for physical fitness because if they hadn't been involved in the MBT initiative they could have been involved in other PE activities which delivered the same outcome 0% deadweight for pride in the school which wouldn't have occurred without the MBT initiative	25% due to influence of the family, except for fewer accidents, which is also attributable to cycle safety campaigns

Stakeholder	Rational for deadweight	Rationale for attribution
Scottish Wildlife Trust	0% deadweight because outcomes would not have occurred otherwise, except for volunteering which was estimated as 25% and 50% for the negative outcome	25% of positive outcome is down to other influences, e.g. families and funders. For the negative outcome, attribution was 0%
Police	25% Estimated	25% Down to other initiatives
Forestry Commission Scotland	50% Estimated, with 75% for outcomes of increased public access, as most could be down to increased use of the reserve and not the MBT	25% Down to other initiatives

1.6 Duration and drop off assumptions

Stakeholder	Outcome	Duration	Drop off	Rationale
Volunteer mountain bikers	Pride in self and a sense of achievement	5 years	25%	Outcome would last even if the activity stopped. Drop off represents the number of volunteers who drop out each year
Local mountain bikers	Local access to take part in their interest/ sport rather than travelling to access trails	5 years	15%	Mountain bikers would use the trails without the school's initiative. Drop off based on numbers of bikers who might drop out of the sport each year
Friends of Cumbernauld Glen	Raised profile	2 years	15%	Profile would last beyond the year but would be 15% less awareness amongst the community
Abronhill High School PE Department	Profile of the school is raised	2 years	20%	Profile would last beyond the year. Drop off is the number of pupils who leave school as a percentage of the school roll, i.e. 20%
Abronhill High School pupils	Improved confidence through acquiring a new skill	2 years	20%	The confidence from having a new skill would last beyond the year. Drop off is the number of pupils who leave school as a percentage of the school roll, i.e. 20%
	Fewer accidents as pupils are more safety conscious	2 years	20%	The increased safety consciousness would last beyond the year. Drop off is the number of pupils who leave school as a percentage of the school roll, i.e. 20%
SWT	Staff have learnt new skills	2 years	15%	The new skill would last beyond the year but assume the level of skill would decrease by 15% if it wasn't practiced
	Perception of SWT of being more than about wildlife and diversifying the organisation's profile	2 years	15%	Profile would last beyond the year, but would be 15% less awareness amongst the community
Forestry Commission Scotland	Young people associate natural environments with pleasure	2 years	0% drop off	The effect of enjoyment would last beyond the year and would not drop off in the second year

1.7 Calculation

Stakeholder	Outcome	Quantity	Value	Less DW	Less Attribution	Impact
Local community	Improved feeling of security within the site as it is busier	6200	£1.11	25%	50%	£2,580.75
	Having a family and child friendly facility in the area and more opportunity for fun	200	£93.60	0%	50%	£9,360.00
	Some local residents resent the mountain biking activity as there are still conflicts between users	10	-£93.60	25%	50%	-£351.00
Volunteer mountain bikers	Pride in self and a sense of achievement	5	£199	0%	25%	£746.25
Mountain bikers	Local access to take part in their interest/sport	44	£2,600	95%	95%	£286.00
Friends of Cumbernauld Glen	Raised profile	2	£2,500	25%	25%	£2,812.50
	Negative impact on FCG's wider aims as a result of the focus on the mountain biking	1	-£30,000	0%	95%	-£1,500.00
Abronhill High School PE department	Happier pupils who have greater health and wellbeing	125	£77.14	75%	75%	£602.68
	PE Department has had more resources to run a new activity and offer more choice	1	£11,333	0%	50%	£5,666.50
	Profile of the school is raised	1	£5,000	0%	50%	£2,500.00
Abronhill High School pupils	Improved confidence through acquiring a new skill	88	£91.00	0%	25%	£5,971.88
	Feeling physically fitter	50	£25.00	75%	25%	£234.38

Stakeholder	Outcome	Quantity	Value	Less DW	Less Attribution	Impact
Abronhill High School pupils (continued)	Feeling proud of being part of a school which is the only school in Scotland that provides mountain biking	125	£10.00	0%	0%	£1,250.00
	Fewer accidents as pupils are more safety conscious	63	£99.00	50%	75%	£773.44
Police	More opportunities for staff training	20	£99.00	25%	25%	£1,113.75
	More able to respond to anti-social behaviour	2	£4,330.00	25%	25%	£4,871.25
Forestry Commission Scotland	Good practice demonstration scheme to replicate in other areas	1	£11,330.00	50%	25%	£4,249.88
	Young people associate natural environments with pleasure	50	£35.33	50%	25%	£662.50
	Greater opportunities to run events using the site leading to more people accessing nature sites	6,200	£1.11	75%	25%	£1,290.38
Scottish Wildlife Trust	Staff have learnt new skills	2	£99.00	0%	25%	£148.50
	Perception of SWT of being more than about wildlife and diversifying the organisation's profile	14	£535.71	0%	25%	£5,625.00
	Increased local support for SWT's Cumbernauld Glen Wildlife Reserve	5	£1,000.00	25%	25%	£2,812.50
	Pupils are not aware that SWT owns and manages the site	113	-£18.00	50%	0%	-£1,012.50

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Present value (PV)	£50,694.62	£16,159.64	£626.40	£490.46	£385.41	£68,356.53

The Social Return Calculation is expressed as a ratio of return. It is derived from dividing the impact value by the total cost of the investment. The impact value is adjusted to reflect its Present Value (PV); this process is called discounting and reflects the present day value of benefits projected into the future. PV is applied to those values that have been projected for longer than 1 year. The interest rate used to discount the value of future benefits in this case is 3.5% as determined in the Government Green Book³ recommended discount rate for public funds. This gives the impact over 5 years arising from the Cumbernauld Glen Mountain Biking initiative as £68,357.

In the account that has been created for this SROI, the total impact calculation is as follows:

- the total impact (PV) calculated from the impact map is £68,357
- the total investment figure in the same period to generate this value was £25,830

The SROI index is a result of dividing the PV impact by the investment. This gives an SROI ratio of 1:2.65. Thus the social return on investment, based on the estimates in the evaluation, was in the region of £3 for every £1 invested.

³ HM Treasury. The Green Book, Appraisal and Evaluation in Central Government
<http://www.nhstayside.scot.nhs.uk/chp/pkchp/focus/6.pdf>

Appendix 2: The Principles of SROI

Principle	Description
Involve stakeholders	Inform what gets measured and how this is measured and valued by involving stakeholders
Understand what changes	Articulate how change is created and evaluate this through evidence gathered, recognising positive and negative changes as well as those that are intended or unintended
Value the things that matter	Use financial proxies in order that the value of the outcomes can be recognised. Many outcomes are not traded in markets and as a result their value is not recognised
Only include what is material	Determine what information and evidence must be included in the accounts to give a true and fair picture, such that stakeholders can draw reasonable conclusions about impact
Do not over-claim	Only claim the value that organisations are responsible for creating
Be transparent	Demonstrate the basis on which the analysis may be considered accurate and honest, and show that it will be reported to and discussed with stakeholders
Verify the result	Ensure independent appropriate assurance

The SROI Network has published a comprehensive guide to SROI. This can be downloaded at www.sroinetwork.org.uk

Acknowledgements

We would like to extend our thanks to all of the stakeholders who provided information to support the SROI analysis.

The Social Return on Investment (SROI) of urban nature sites programme was supported by Scottish Natural Heritage



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For further information please contact:



greenspace scotland
12 Alpha Centre
Stirling University Innovation Park
Stirling, FK9 4NF

Tel: 01786 465934

E: info@greenspacescotland.org.uk

W: www.greenspacescotland.org.uk

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