SRUC – Edinburgh

Environmental Resource Management – Year 3

Rural Planning & Environmental Impact Assessment

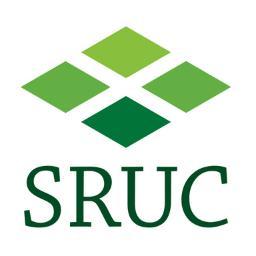
Written Assessment (1/1)

***A Critical Evaluation of the effectiveness of Environmental Impact Assessment’s***

***(Case Study: Destination Hillend)***

A picture containing sky, outdoor, mountain, tree

Description automatically generated



By Angus Maclean (S30033836)

Word count – 2,534

Introduction to project:

Midlothian Snowsport Centre is an outdoor snowsports centre situated at Hillend, Edinburgh in the south-east of Scotland. The current facility has a range of slopes which accommodate for users of all abilities, with 2 large main slopes, 3 nursery slopes, a jumping slope and a number of features which allow freestyling, as well as an array of tubing slopes. The facility first opened in the 1960’s under several different ownerships. In 1996 ownership was granted to Midlothian Council, who currently still own and run the facility. Since the last major investment and partial refurbishment of the facility in 2008, the site has now been deemed to require further refurbishment, as some features on site have been described as tired-looking and losing their functionality. Over the course of Midlothian Councils ownership of the Snowsports centre, the facility has undergone some substantial periods of economic loss and has therefore been heavily subsidised to remain functional. Therefore, in May 2019, Midlothian Council approved an economic investment to the sum of £13.8m in order to refurbish and improve the facility with the introduction of several new features.

The proposal put forward by the developers includes the installation of an alpine rollercoaster, a zipline, an ‘activity dome’, a new freestyle jump slope, a new reception building for the centre, a food court, various function suites, retail space, an array of ‘glamping’ wigwams and the potential for the erection of a hotel. In addition to the wide array of attractive new features and attractions, much of the existing features will undergo either partial or full refurbishment and the car-parking capacity will be increased to accommodate the anticipated increase in footfall. The installation of these new features is scheduled as a phased or staggered installation over the course of two or three years in order to keep the snowsport centre open and maintaining income over the whole course of the project. The proposed upgrades are expected to increase custom somewhere in the region of 25-100% more than the current baseline, due to the increased range of activities and services available on site (Sweco, 2019).

An environmental impact assessment (EIA) was carried out on the current site and the potential and estimated effects of the proposed development project. The schedule 2 EIA for the potential development of Destination Hillend was carried out by Sweco, a leading European consultancy firm with a base within Edinburgh. Aspects of the project taken into consideration during the screening phase were; noise and vibrations, traffic and transport, socioeconomics, biodiversity impact, air quality, impacts upon water, effect upon cultural heritage and the effect on the landscape and other visual aspects. Much of the EIA was carried out using a maximum parameter approach, meaning all of the proposed features were taken into consideration at the largest potentially allowed scale, height or capacity. This method is used to ensure that the most potentially severe environmental impacts of the development are accounted for, in its largest permitted scale, height or capacity. In the case of this proposed development, there were several instances where this approach was used, the alpine rollercoaster being one of them, where the feature was accounted for at its tallest permitted height to gauge how much visual damage the feature would inflict upon the landscape, and how far it could be seen from outwith the site.

Critical Evaluation of Chapter 9 (Landscape and Visual):

The chapter begins with an introductory section providing some brief context explaining that the contents are based upon the findings of the Landscape and Visuals Impact Assessment (LVIA) carried out by Sweco and their associated chartered landscape architects. It is highlighted that the provided information gives context on the potential, residual and cumulative effects that may be resultant of the proposed project, both during construction and during its operational phase.

A section provided context in relation to policy across a national, regional and local level. The Third National Planning Framework (NPF3) and Scottish Planning Policy (SPP) was referred to within the national policy section. The policies referred to within the NPF3 are in reference to the associated health benefits that could be earned by utilising the services provided by the proposed development. In reference to the SPP, the policies highlighted were those which state that developers should make efforts to have minimal adverse effects upon the surrounding environment and include afforestation on site as one of their primary objectives. In regard to regional policy, the Strategic Development Plan for Edinburgh and South-east Scotland was considered, with reference to the key points of the document promoting the conservation and enhancement of the natural and built environment. In terms of the local policy that the project intended correspond with, several objectives of the Midlothian Local Development Plan were highlighted. Policies ENV6, ENV7 and ENV11 highlight the need to maintain Special Land Area’s (which the Pentland Hills are categorised as), to maintain the natural land character existing on site and ensuring any additions to the landscape are compatible to the current aesthetic and the third in relation to the protection of woodland, trees and hedges on site.

The policy highlighted all highly relevant to the development, considering the area is within the Pentlands Regional Park, which is considered a Special Land Area. The development proposal included the planting of some woodland as screening for some of the features on site, as well as ensuring 25m buffers from some of the features on-site such as Caerketton Hill Fort. The inclusion of relevant policy as an introduction to the chapter is smart and provides much needed context for the reading beyond. Each chapter regarding each of the broad topics which received screening have their own policy section, which therefore makes finding the policy relevant to the specific topic of interest very efficient.

The methodology section of the chapter covers the different methods of data collection used within the LVIA. The first stage of the LVIA was identifying the areas of the project which could have significant effects upon the visual amenity or the landscape resource on site, then identifying the landscape and visual receptors which would be directly affected by the development and creating an initial assessment on the potential effects felt by them, then finally identifying potential measures for mitigation of these effects or areas where enhancement of the natural landscape could be achieved. The scope considered the potential impacts of the project both during the construction/development phase, as well as the operational phase.

Desk study data collection for the LVIA consisted of; utilising Ordnance Survey mapping and aerial photography, utilising various published Landscape Character Assessments (LCAs) and other forms of photography. Some site-based studies involved gathering further information of landscape elements, the capacity for screening by tree cover and collecting imagery from certain locations on-site that the development will be visible from in order to determine the levels of visual disruption. The consultation phase was described as a singular interaction with Midlothian Council where Sweco consultants shared a list of 8 viewpoints within a 2km radius of the development site with the Council, inviting comments upon whether the development would have a negative impact upon these areas as viewpoints for general public. The council provided comments on each of the viewpoints, amending one of the viewpoints locations and requesting an additional 2 viewpoints that lie beyond the 2km radius be considered due to the high level of footfall and recreational use they receive (the Braid Hills and Arthurs Seat).

In terms of both the landscape and the visual aspects of assessing each viewpoint, a similar technique was used. Both were determined on; ‘the degree of change that takes place’, ‘the geographical extent of the area that would be changed/be newly visible’, ‘the likely duration of the change’ and ‘whether or not the change is reversible’. A judgement was to be made upon each of these factors, using ‘professional judgement’, and then each being prescribed to the categories of either ‘significant’ or ‘not significant’. Whilst Sweco’s ‘professional judgment’ is most likely of a very high standard of reliability, perhaps an actual published guideline on the subject should have been used. The EIA carried out upon the Forth Replacement Crossing by Jacob’s (Jacobs, 2009) utilised several published and well-established supplementary guidelines for assessing the impacts upon the landscape and visual environment e.g. Landscape and Visual Assessment and supplementary guidance (Scottish Executive, 2002), or Guidelines for Landscape and Visual Impact Assessment (IEMA, 2002). Using an industry accepted guideline as a baseline would increase the credibility of Sweco’s response and provide reinforcement for their advice.

The LCA publications used were Scottish National Heritage’s (SNH) ‘National LCA map’ and the City of Edinburgh Council’s ‘Edinburgh LCA map’, both of which were deemed to provide an appropriate level of detail for assessments to be made but the Edinburgh LCA being in greater detail over the site. Additionally, the 10 viewpoint sites were visited, and photographs were taken from each point to as supporting evidence for the designated prescription to an either significant or insignificant effect on landscape and visuals. Each of the 10 viewpoints were assessed and categorised with a summary statement. Reasoning often included reference to social factors, recreational footfall, cultural heritage or visual important for the local community.

Mitigation and ‘enhancement measures’ are offered toward the end of the chapter, but they are very vague and broad. It recommends that the development should incorporate a soft landscape scheme in order to compensate for loss of tree cover from the construction phase. Besides that, no other mitigation is recommended or suggested, which could be construed as slightly poor.

The chapter is then closed with a list of the potential cumulative effects and residual effects that could arise from the proposed development. Two other potential projects in the near vicinity could also be approved for construction which would increase the negative impact on the local landscape, both physically and visually. The EIA does not provide any form of mitigation for these cumulative effects should they occur; however, it would seem appropriate to plan ahead and create a potential strategy or mitigatory methods for addressing these effects.

The project design is then deemed to have no significant residual effects during the construction or operational phase in terms of landscape or visual effects. However, due to the lack of consultees, and considering the only consultee was in actual fact the owner of the facility themselves, perhaps a greater effort could have been made to determine the predicted impact from other sources or social groups.

Discussion on Environmental Impact Assessments addressing Sustainability:

Environmental Impact Assessments (EIA’s) should always, but often are not, be completed prior to any major financial backing to allow for any necessary amendments to be made to the project plan. However, this is easier said than done, as two of the largest barriers to successful implementation of EIA’s are time pressure and lack of funding (Wright et al., 2013) Too often, consultants are not given enough time to execute sufficient scoping or carry out enough research, with project or legislative deadlines looming, so the resulting assessment is not as effective as it should be. A lack of early and effective scoping can alter the rest of the project by create diversions or often an increased workload further down the line. A higher level of interaction with relevant stakeholders within the scoping part of the assessment could aid to prevent backlash and any potential stalling of the project, as well as producing a more holistic yet in-depth assessment (Finnveden et al., 2003) As we strive for sustainability within planning, the view that some developers, stakeholders or investors share of EIA’s just being a menial but necessary phase of development that can be rushed through with minimal expenditure, effort and investment of time, must be expelled. Rushing through an EIA and attempting to cut corners can prove costly to both the developers or owners, and/or the environment and wider community too.

The full extent of human activities or developments are rarely, if ever, fully known, especially when you consider that every development site is different and comes along with its own parameters, which aren’t always immediately obvious - developments can cause antagonistic responses from the natural environment they are erected within (Wright et al., 2013). Therefore, ecosystem services and physical features of the environment should receive much more interest during planning and should be prioritised. A full assessment of ecosystem services and provision of natural capital existing, and potentially existing, on the desired site for development should be carried out within the EIA (Bond et al., 2009). The precautionary principle should be always be exercised. For example, mass clearings of woodland or vegetation for development upstream could have significant impacts on the wider ecosystem, potentially causing erosion or flooding downstream.

Cumulative effects should always hold a much more prominent position within EIA’s and the potential effects of them should have planned strategies. Using the method would encourage deeper rooted thought and investigation into the potential long-term impacts that the development could have on the surrounding site and its community. Sustainability can only be achieved if long-term, preventative and anticipatory future planning is considered, even within the smaller projects (Warren, 2009). Which brings the next point into relevance; EIA’s should be audited to check for shortcomings (Wright et al., 2013). Developers often choose the cheaper contractors or those who will complete the EIA in the shortest time, resulting in a poorer standard of assessment. Therefore, in order to ensure that EIA’s are always carried out to a high standard, an auditing service for EIA’s should be created, whether that role be taken on by the local, regional or governmental planning authorities or independent EIA review bodies are commissioned (Lee and Colley, 1991) This would establish an industry wide standard and not only make national development more environmentally sustainable but most likely also lead to economic savings for individual developers and stakeholders.

In relation to the efficiency and effectiveness of EIA’s, a frequented point throughout the literature is that the length of an individual assessment can alter its quality. There are several reasons for this being the case; primarily time pressures or pressure from developers, however, it seems social or industry pressure is becoming more predominant now too (Fernández,de Brito and Fonseca, 2018) The length of an EIA is being more heavily scrutinized. In 1996, Barry Sadler produced a report in 1996 where he categorized EIA into size groups. Those with <50 pages referred to as ‘small’, those 51-400 as ‘medium’ and those >400 as ‘large’. The ever-increasing availability of new information and shared data, along with the afore mentioned pressures, are now spurring the question, does the length of an EIA effect its overall quality. The world bank stated that environmental statements should contain no more than 100 pages, whilst the UK set a limit for 150 pages (excluding cases with special circumstances), in an attempt to encourage consultants to produce shorter, more concise yet user friendly assessments (Sadler, 1996).

The current system existing for EIA could be improved by considering the afore mentioned solutions. Industry accepted EIA review boards or organisations could remove many pressures that the industry is faced with, as well as preventing some developers from avoiding harder and more in-depth scoping or research methods.

References:

Bond, A. J., udia Viegas, C. v, Coelho de Souza Reinisch Coelho, C. and Maurício Selig, P. (2009). *Informal knowledge processes in the underpinning for sustainability outcomes in EIA*? In: *Journal of Cleaner Production.* 18. pp.6-13.

Fernández, G. M. R., de Brito, L. L. A. and Fonseca, A. (2018). *Does size matter? An evaluation of length and proportion of information in environmental impact statements.* In*: Environmental Impact Assessment Review*, 73, Elsevier Inc., pp.114–121.

Finnveden, G., Nilsson, M., Johansson, J., Persson, Å., Moberg, Å. and Carlsson, T. (2003). *Strategic environmental assessment* *methodologies* In: *Applications within the energy sector*. Environmental Impact Assessment Review, 23 (1), Elsevier Inc., pp.91–123.

Institute of Environmental Management Assessment. (2002) *Guidelines for Landscape and Visual Impact Assessment*. 2nd Ed., London.

Jacobs. (2009). *Forth Replacement Crossing DMRB Stage 2 Corridor Report*. 1. (Ch.11-12).

Lee, N. and Colley, R. (1991). *Reviewing the quality of environmental statements: review methods and findings* In: *Town Planning Review*, 62 (2), pp.239–248.

Midloathian Council. (2017). *Midlothian Local Development Plan*. Edinburgh. [Online]. Available at: www.midlothian.gov.uk/MLDP.

Sadler, B. (1996). *International Study of the Effectiveness of Environmental Assessment*. Canadian Environmental Assessment Agency.

Scottish Executive. (2002). *Landscape & Visual Assessment* In: *Driving Manual for Roads and Bridges*. Vol.11, Supplementary Guidance.

Scottish Government. (2014a). Scotland’s Third National Planning Framework.

Scottish Government. (2014b). Scottish Planning Policy.

Sweco (2019) Environmental Impact Assessment: Destination Hillend.

Warren, C. (2002) *Managing Scotland’s Environment*. 2nd Edition. Edinburgh University Press. Edinburgh. pp. 379-383.

Wright, A. J., Dolman, S. J., Jasny, M., Parsons, E. C. M., Schiedek, D. and Young, S. B. (2013). *Myth and Momentum: A Critique of Environmental Impact Assessments* In: *Journal of Environmental Protection*, 04 (08), Scientific Research Publishing Inc. pp.72–77.