





Coastal Schemes with Multiple Funders and Objectives FD2635

Case Study Report 3: Cleveleys Coastal Defence Improvement and Promenade Enhancement Scheme



Image courtesy of the Wyre Borough Council

This case study is one of 14 documents supporting the research project Coastal Schemes with Multiple Objectives and Funders - Case Studies FD2635, available from http://tinyurl.com/6dzyusy. This research was conducted in 2010/2011 by Maslen Environmental on behalf of Defra and the Environment Agency's Research and Development programme.

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1 Case Study: Cleveleys Coastal Defence Improvement and Promenade Enhancement Scheme

1.1 Introduction

Cleveleys is located just north of Blackpool in Lancashire. Wyre Council led on this coastal scheme to protect the people of Cleveleys from tidal flooding by improving basic infrastructure and developing a coastal defence system, enhancing the promenade and creating a public area behind the defence. The scheme has transformed a dated seafront originally constructed in the 1920s into a modern 21st century seaside frontage.

The first phase of the scheme which included emergency works started in 2000 following sea wall failure in 1997. Between 2003-2005 the business case was developed, detailed design and construction started. The construction of defences was completed March 2010, the funding for the environmental improvements was secured in May 2010. The phases of work have a total cost of £26million and the phases are shown in Figure 1. The whole seafront has been redesigned with a split-level promenade for the public to enjoy including a waved revetment used for primary flood defence. The adjacent park has been included in the improvements and a new leisure complex built behind the sea wall.

Project partners include: Wyre Council (lead), Birse Coastal (Birse Civils), Faber Maunsell, Ferguson McIlveen (now Scott Wilson), Broadbent - Artists Designers Makers, Department for Environment, Food and Rural Affairs (Defra), Environment Agency, Northwest Regional Development Agency (NWDA), European Regional Development Fund (ERDF), Cleveleys Seafront Partnership and Rossall Beach Residents Association.

1.2 Objective Setting

1.2.1 Project Drivers

One of the main drivers was the Wyre Flood and Coastal Defence Strategy Plan which detailed a 100 year programme of works necessary within the urban core area of Wyre of which works at Cleveleys and Stanah Estuary were deemed to be the most urgent. The sea defences at Cleveleys were regularly overtopped and about once every five years shops in the town were flooded, the largest recent flood occurring in 1977 (2,000 properties flooded).

The scheme was designed to protect the people of Cleveleys from these coastal flooding events. This presented an opportunity to enhance the promenade based on extensive consultation with local people and visitors. The existing defences were created in the 1920s and have come to the end of their useful life.

1.2.2 Partnership Objectives

The basis behind partnership working was to work together to create a project based on trust, mutual goals and a commitment to deliver a quality scheme to the public whilst providing best value for money. Collaboration is characterised by:

- The successful delivery of the Cleveleys Coastal Defence and Promenade Improvement Scheme;
- A greater trust and openness sharing of all information and offices;
- A shared understanding Unlike traditional contracts the Contractor has been part of the team from the outset; and
- Understanding and sharing risks Construction on the coast has a number of high risks notably the weather, tides and ground conditions. Collaborating has allowed better understanding and control of risks and a team approach to problem solving.

The European Regional Development Funds main priorities were to:

- New and improved visitor / cultural attraction;
- New and improved visitor / cultural facilities; and
- Environmental enhancement scheme (the provision of high quality public realm)



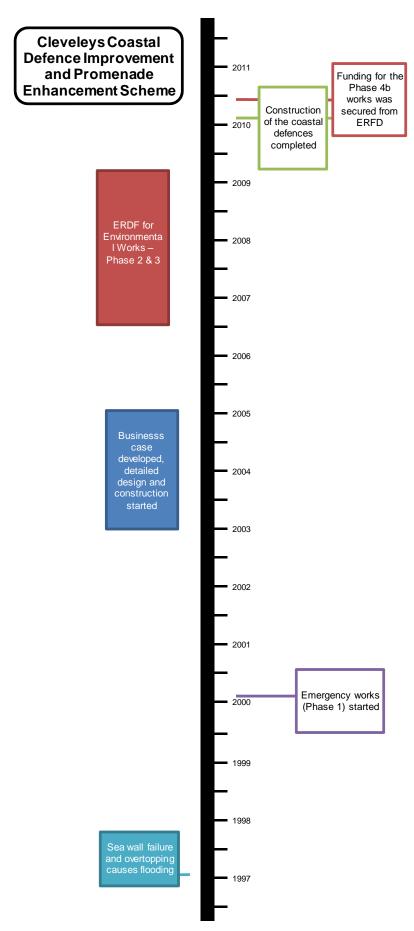


Figure 1 - Timeline for the Cleveleys Coastal Defence Improvement and Promenade Enhancement Scheme



Wyre Council's priorities are to protect from flooding to a 1 in 200 year standard and create a unique 'sense of identity' for the area increasing public satisfaction and creating public open spaces by redeveloping Cleveleys Promenade. Other council objectives included increase the visitor spend and creating a holiday destination in Cleveleys. The Environment Agency's main aim was to reduce flood risk to properties.

1.2.3 Project Objectives

The main objective was flood risk management to protect the 8,700 properties and 219 industrial units to a 1 in 200 year standard to safe guard the town of Cleveleys from tidal flooding. There have been a number of additional benefits from the works such as:

- An enhanced promenade to provide intrigue, education and participation;
- Enhancement of the tourism offer and spin off benefits for the retail and business community;
- 150 jobs created during the construction phase;
- Joining the town with the beach, for solely functional purposes;
- Improved image of the town, improved public spaces and benefits to the local economy through tourism and local investment;
- A sense of local community pride that has risen in the wake of the construction work;
- Regeneration and sustainability of Cleveleys;
- An enhanced the visitor attraction of the 'shopping by the sea' culture by linking the high street offer to that of the promenade.

1.3 Partnerships

1.3.1 Building the Partnership

Wyre Council's Coastal and Environmental Design teams have been working with Birse Coastal (Birse Civils) the main contractor and lead designers Faber Maunsell to develop a scheme that fulfils the function of a coastal defence whist creating an attractive promenade experience. It was Wyre Councils' responsibility to monitor and maintain the defence into the future; a partnership charter was developed between Birse and Wyre Council in the early stages of the project to set the objectives.

The main steering group involved monthly meetings with the Birse's Managing Director, Birse's Commercial Director, Birse's Project Manager, Wyre Council's Project Manager and Director of Neighbourhood Services together with the Council's Portfolio Holder

Other project partners include: Ferguson McIlveen (now Scott Wilson), Broadbent - Artists Designers Makers, Defra, Environment Agency, Northwest Regional Development Agency (NWDA - the gatekeepers of the ERDF funding) and European Regional Development Fund (ERDF). Two local partnerships also formed these included:

- The Cleveleys Seafront Partnership consists of local residents and businesses who formed to conserve and enhance the new seafront and to promote its use. Wyre Council instigated the group, its now run by volunteers and is currently in the process of becoming a Community Interest Company, and
- The Rossall Beach Residents Association was formed to promote the beach area immediately north of the new works and has been active in making improvements to this section of Cleveleys seafront.

There was also a steering group of councillors, who were involved from the design phases in order that they understood what the scheme was trying to achieve and supported the environmental improvements.

Successful partnership working is characterised as including:

- Early contractor involvement in the scheme design;
- Innovative ideas and technology utilised;
- Enthusiastic team spirit;
- Safety as a priority;
- Solving problems together;



- Excellent communications;
- Joint goals; and
- Working together for the public benefit.

There was a large programme of public consultation. 18 months before the scheme commenced the contractor started to work with the community. This enabled the public to:

- Meet the contractor at an early stage and gain confidence in the working methods;
- Engagement in dialogue which has shaped both design and construction activities, through real understanding if the key issues;
- Form good relationships with site staff to resolve concerns and issues.

This ongoing consultation has achieved public involvement and buy-in to the scheme. The dedicated onsite information centre has proven very informative for residents and visitors and the scheme's web site has proved very popular.

1.3.2 Partnership Working and Governance

The partnership between Birse and Wyre Council has won over 25 awards. The Scheme Partnerships has an open-book, live cost monitoring system, which can be reviewed and observed at any time. Any savings or over-target expenditure will be shared equally between the partners.

The success of the partnership is built on trust, understanding and shared objectives and these have been achieved through:

- Team building exercises;
- Risk management workshops; and through
- Value engineering throughout the design phase.

Throughout the scheme, the whole team has been involved and informed by:

- Establishing a project-specific, on-line information channel, available to all team members, suppliers and funding bodies;
- Shared office accommodation;
- Weekly design meetings; and
- Steering group meetings, involving client and contractor directors and service heads, to ensure high-level support for the partnership.

The partnership has developed an excellent understanding of each member. This has allowed blending of the partners' cultures and a philosophy of recognising and utilising each other's strengths.

1.4 Approvals, Planning Context and Legislation

All project approvals went through the councils Cabinet.

Environment Agency approval was received through the National Review Group (NRG) through the submission of a business case in the form of a Project Appraisal Report (PAR).

As part of the master planning process, intensive public consultation was undertaken.

Coastal Protection Act approval and the FEPA licences were required, this was achieved through meeting with the FEPA representatives in the early stages of the scheme.

A scoping document covered the environmental impacts was prepared and additional studies undertaken on the impact on birds and a biotope study were undertaken at the request of Natural England (NE). If the scheme was undertaken again they would suggest that local NE representative came to the site at an early stage. As part of the ongoing monitoring of the impacts of the scheme an Argus camera system was installed on site a year before construction and continued to record during the construction phase, this is still in place to monitor the ongoing impacts.

1.5 Funding Arrangements

The three phases of work had a total cost of £26 million. Funding came from multiple sources these included approximately £22.6 million from Defra's FDGiA, £660,000 from ERDF funding (£450,000), the Wyre Council funding £633,000 and the Environment Agency £2.8 million.



Wyre Council managed the funding risks and tried to minimise the risks to the council. Successful delivery of ERDF outcomes during the first two phases of the scheme led to further funding on phase 4. The first phases funding was delayed slightly by approximately six months however careful programming achieved the aim of integrating the improvement works fully with the construction works, rather than bolting them on afterwards.. Additional funding has also been secured to develop a mystical art trail through Sea Change funding which was secured through CABE. This project will be delivered during 2011.

Barriers to gaining the funding include the development time taken to write the bids. It is also difficult to sell a vision when the funding is not fully in place; the process to secure Defra FDGiA was first based on a coastal defence scheme. The ERDF funding after the scheme had started to be constructed. There was therefore a risk that the environmental enhancements identified in the vision to residents would not materialise. The challenge was to run a standard coast defence scheme, then an 'enhanced' coast defence scheme in parallel. Developing the coastal elements of the scheme too far in advance was considered a risk, as much of the construction elements were used as match funding and if implemented prior to the ERDF agreement could not be considered. There were therefore key decisions to be made to the construction order to ensure that the environmental enhancements could be delivered. Any delays or reduction in the overall ERDF funding which was used for enhancements and public realm could have resulted in a funding shortfall or non-delivery of key enhancement features. The partners felt they would rather have started the ERDF process earlier in the scheme development with the intention of securing the funding prior to construction starting. In practice, the basic scheme and enhanced elements were conducted at the same time and produced the integrated scheme that was envisaged.

Wyre Council sought finance from a variety of sources however but found this a complicated process. The success in obtaining funding through ERDF was in part due to the good working relationships with the community developed through Cleveleys Seafront Partnership, who assisted in securing funding and donated their time to attend meetings. The local community also sponsored organised events and festivals in the newly developed areas (e.g. fireworks and jazz in the park).

At the start of the scheme there was no track record with the ERDF, however after securing funding for the first phase it was felt that trust was developed as the scheme delivered against the objectives set. The Outputs Report submitted to ERDF evidenced 208 jobs created directly from the scheme, and further indirect jobs are anticipated from associated industries, supply chain operations and support networks and increased sales totalled £5.08 million¹ (Wyre, Borough Council, 2010b), this ties in with Defra requirements to place a value on tourism impacts of schemes. Having met the evaluation criteria outlined by ERDF this made it easier to secure future funding.

The partners also applied for National Lottery and SITA funding but described how they, "fell at the first hurdle because of the difficulty in tailoring a scheme to fit the funding bodies objectives" (Green and Paddan, 2010).

The scheme has built confidence for private sector investment into the area, with a new entertainments complex being developed directly as a consequence of the scheme. Local businesses have also invested in there own infrastructure and improved the frontages, for example, a local hotel has spent £1 million on refurbishment. The whole area has received an uplift and a "buzz" through the schemes development.

1.6 Lessons Learnt

Wyre Council developed an understanding of the community needs by working with them to decide on the most suitable scheme options. Essentially the council built trust within the community. Existing local communication channels were built upon to raise awareness and gain public support.

The scheme demonstrates excellence in design, construction and management which over achieved on job creation and inward investment targets. For more information please see the scheme specific website http://www.cleveleys-seawall.co.uk/ which documents the construction from start to finish along with pictures and links to web cams on site.

The schemes' key lessons were as follows:

- It was important for this scheme to develop a strong client and contractor relationship in the design process;
- There was a close interaction and trust developed between partnership members;

STREAM (Scarborough Tourism Economic Activity Monitor), statistics were used to calculate increased sales for the scheme together with analysis of local Tourist Information Centre statistics. In the future STREAM statistics will not be able to be used when evaluating success and instead primary survey research data will be needed.



- Maximising productively during tidal windows is critical to the success of a scheme, as is reducing the potential risks of damaging sensitive marine eco-systems;
- Experience and a real understanding of the risks associated with working in the coastal environment were also key reasons for the ongoing success of the this project;
- A programme of sectional construction (in Phases) allowed large sections of promenade to remain open during the construction process, thus minimising disruption to the local communities and visitors:
- "A big lesson we learnt when applying for the ERDF funding was clearly establishing the separation between the flood defence works from the environmental improvements and public realm works. This was overcome by a number of meetings with ERDF representatives which initially demonstrated what was achievable with and without the additional funding and then following through with this on site." (Green and Paddan, 2010);
- The technical innovation through the use of offsite pre-cast facilities created specifically for this contract and that of a neighbouring authority; and
- The development of processes and materials through early and ongoing testing.

1.7 References

Centre of Excellence North West. (No date). Case Study 6: Cleveleys Coastal Defence Improvement Scheme.

Cleveleys Seafront Partnership. (2010) Cleveleys Seafront Partnership [online] http://www.cleveleysseafrontpartnership.co.uk/ (Accessed 30 June 2010).

Green, C. (2010). Cleveleys Coastal Defence Improvement Scheme [Telephone]. Personal Communication with Harvatt, J. (27 April 2010).

Green, C. Paddan, K (2010) Cleveleys Coast Protection Scheme. [Face to face interview]. Personal Communication with Hudson, T. (18th Nov 2010).

Wyre Borough Council. (2004) Item No. 09 - Cleveleys Coastal Defence Improvement Scheme - Appointment of Contractor - Cabinet - Report - 15/03/2004 [online] http://www.wyrebc.gov.uk/Page.aspx?PvnID=10519&PgeID=10519&ClgPN=15%2F03%2F2004&ClgPV= 10102&ClgPg=10102&BrdCb=1-24-344-347-354-10057-10061-10102 (Accessed 30 June 2010).

Wyre Borough Council. (2009) Cleveleys Promenade, Outputs & Results - Report 2009. Wyre Borough Council, Birse Coastal, Defra.

Wyre Borough Council. (2010a) Cleveleys Coastal Defence Improvement and Promenade Enhancement Scheme [online] http://www.cleveleys-seawall.co.uk.htm (Accessed 30 June 2010).

Wyre Borough Council. (2010b) Case Study: Cleveleys Coast Protection Scheme, produced by Birse Coastal

Wyre Voice. (2004) Keeping you up to date with the scheme to improve town's defences: Cleveleys sea of change [online] http://www.cleveleys-seawall.co.uk/Reports/P5.pdf (Accessed 30 June 2010).