

Central Rhyl Coastal Defence Works

Well-being Impact Assessment Report


This report summarises the likely impact of the proposal on the social, economic, environmental and cultural well-being of Denbighshire, Wales and the world.

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| Assessment Number: | 982 |
| Brief description: | Coastal defence works at Central Rhyl to reduce the risk of flooding and coastal erosion. |
| Date Completed: | Version: 0 |
| Completed by: | |
| Responsible Service: | Highways & Environmental Services |
| Localities affected by the proposal: | Rhyl, |
| Who will be affected by the proposal? | The residents and business owners of Rhyl will be positively impacted as the proposed flood defence scheme will safeguard their homes and businesses. |
| Was this impact assessment completed as a group? | No |

IMPACT ASSESSMENT SUMMARY AND CONCLUSION

Before we look in detail at the contribution and impact of the proposal, it is important to consider how the proposal is applying the sustainable development principle. This means that we must act "in a manner which seeks to ensure that the needs of the present are met without compromising the ability of future generations to meet their own needs."

Score for the sustainability of the approach

 (3 out of 4 stars) Actual score : 33 / 36.

Summary for each Sustainable Development principle

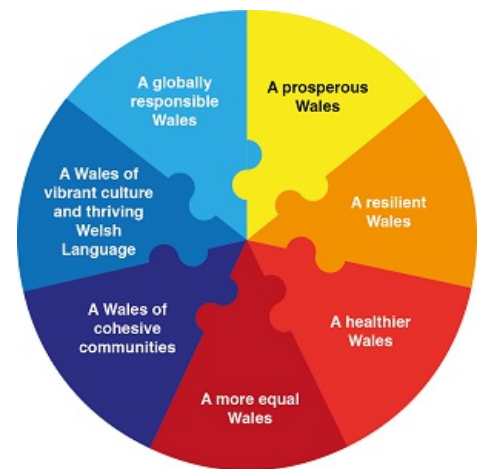
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| Long term | <p>The project will be carried out in a way that ensures that are minimal negative impacts on the natural environment. There may be opportunities to improve biodiversity in the built environment. Flooding of properties creates a large amount of contaminated, non-recyclable waste. Post flood clear up operations use a considerable amount of energy/fuel, therefore this project will reduce this risk. There are strong links between flooding and climate change (sea level rise). The project will draw these issues to the attention of Denbighshire residents. Flood risk is understood to have a negative impact on the economic prosperity of communities, Therefore, reducing flood risk will have a positive impact. The project involves heavy civil engineering work which will provide an opportunity for local employment in that sector. Reduced flood risk will encourage potential future employers to invest in the area. Coastal engineering is a specialism and the project has the potential to enable to development of local skills in this field. By developing this scheme it will protect as many properties as possible to the highest economically achievable standard.</p> |
| Prevention | <p>Coastal defence works at Central Rhyl will reduce the risk of flooding and coastal erosion. The project will make Central Rhyl more resilient to future flood events. The current and ongoing risk of flooding of properties has a significant negative impact on the prosperity of the county, as demonstrated by the floods that affected the region in 2012 and 2013. Therefore, the project will have a positive impact on the community. The project will have the greatest positive impact on the most vulnerable members of the community. People with protected characteristics are our most vulnerable residents during a flood event. Reducing the risk of flooding will improve their well-being. One of the consequences of flooding is high insurance costs, which could result in poverty. The project could make properties cheaper to insure for residents.</p> |
| Integration | <p>The project is likely to result in improved opportunities for beach based leisure activities and local businesses will also benefit from the project, it will also have a beneficial impact on the mental well-being of residents currently at risk of flooding. The existing beach at this location is occasionally stripped of sand due to coastal erosion. The project should reduce this likelihood and will conserve a sandy beach. There's an opportunity to improve the quality of the existing beach at Central Rhyl, with an access point for all users, which will encourage greater use by residents and tourists. Peoples concerns and fears of being flooded have a significant impact on their emotional and mental well-being. The project will significantly reduce this likelihood.</p> |

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| Collaboration | We have consulted with the Council's Countryside Service team and Natural Resources Wales. We have consulted Rhyl Town Council, Rhyl MAG and the community. We are working with other council projects (Central Prom project) to provide access onto the beach. The project involves heavy civil engineering work which will provide an opportunity for local employment in that sector. Reduced flood risk will encourage potential future employers to invest in the area. Coastal engineering is a specialism and the project has the potential to enable to development of local skills in this field. By reducing the risk of flooding it will reduce the need to drain resources from the emergency services once a flood clean up is needed. |
| Involvement | We have consulted with local members in Rhyl, community groups, local businesses and are keeping the public up to date with regular communications in the local newspapers and online / paper based consultations. |

Summary of impact

Well-being Goals

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| A prosperous Denbighshire | Positive |
| A resilient Denbighshire | Positive |
| A healthier Denbighshire | Positive |
| A more equal Denbighshire | Positive |
| A Denbighshire of cohesive communities | Positive |
| A Denbighshire of vibrant culture and thriving Welsh language | Neutral |
| A globally responsible Denbighshire | Positive |



Main conclusions

The aim of the project is to reduce flood risk in Central Rhyl. Provided this aim is fulfilled, the result will be a more prosperous, resilient, healthy, equal and globally responsible Denbighshire.

Evidence to support the Well-being Impact Assessment

- We have consulted published research or guides that inform us about the likely impact of the proposal
- We have involved an expert / consulted a group who represent those who may affected by the proposal
- We have engaged with people who will be affected by the proposal

THE LIKELY IMPACT ON DENBIGHSHIRE, WALES AND THE WORLD

A prosperous Denbighshire

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| Overall Impact | Positive |
| Justification for impact | The positives to this proposal far outweighs any short terms negatives. The opportunities for work experience, training, apprenticeships and the use of local businesses is positive. |
| Further actions required | The construction emissions for the proposed scheme are estimated to be 7,800tCO ₂ e. This includes the embodied carbon within the proposed construction materials, transport of materials to site, and the use of plant on-site. Materials were estimated to account for 86% of these emissions with concrete being the largest contributor (45% of the total construction emissions). Mitigation to reduce the emissions associated with the proposed scheme include the use of standardised precast concrete elements and the reuse of existing infrastructure (including the sky tower and children's village walls). In addition, the use of 85% recycled steel rather than world average steel throughout the proposed scheme could result in additional savings of up to 1,000tCO ₂ e. The existing coastal defences between Splash Point and the Events Arena are also to be retained instead of being replaced as part of the scheme. The works to the coastal defences Splash Point and the Events Arena are limited to repairs and rock scour protection. Further work is ongoing to investigate the potential to reduce the overall extent of rock scour protection for the proposed scheme, which would if realised would likely introduce further construction emission savings. It's worth noting that although there will be a significant upfront carbon cost due to the construction works (mostly quantities of concrete and rock/fill) the scheme itself is a response to the effects of climate change in order to protect nearly 600 properties from flooding and coastal erosion; and safeguard the future of the town's tourist economy. A negative in this proposal is the need to use lorries. Main issues might be access into the town and foot access to business during construction. A park and ride alternative will be looked into . Although we cannot mitigate these impacts, the need to use them is relatively short lived. |

Positive impacts identified:

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| A low carbon society | If there is less risk of flooding then more people can cycle, walk. Reducing the risk of flooding will reduce the need to use emergency services and their large fire engines/ambulances/boats etc reducing the carbon emissions. |
| Quality communications, infrastructure and transport | Our project will put Denbighshire in better stead for operating in more extreme and frequent weather events as it will reduce the risk of flooding due to rising sea levels. |
| Economic development | The project could help lower house insurance premiums for residents. Through community benefits, there will be a number of work experience places to be taken by local young adults who may want a career within civil engineering. The project will safeguard future tourism opportunities in Rhyl. |
| Quality skills for the long term | As young adults have work experience opportunities then hopefully they will go on to qualify in their chosen fields and take forward quality skills for their futures, and possibly for their families futures. A positive outlook on employment will bring positive health and well being. |

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| Quality jobs for the long term | Local community benefits will see the need for local young adults to engage with work experience and apprenticeship opportunities. |
| Childcare | The Welsh Government have a scheme called Childcare Offer in Wales which financially helps parents of 3/4 year olds with childcare needs. Some employers offer childcare voucher schemes in which the government help with childcare costs. |

Negative impacts identified:

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| A low carbon society | The main negative in this project is the significant upfront Carbon impact due to the the construction works (mostly quantities of concrete and rock/fill) Some other issues might be access into the town and foot access to business during construction. A park and ride alternative will be looked into . |
| Quality communications, infrastructure and transport | |
| Economic development | Some disruption to local businesses but the scheme will work with businesses to limit disruption |
| Quality skills for the long term | |
| Quality jobs for the long term | |
| Childcare | More young adults who gain employment may need access to affordable childcare. |

A resilient Denbighshire

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| Overall Impact | Positive |
| Justification for impact | The project will make east Rhyl more resilient to future flood events. |
| Further actions required | Through consultation with the Council's Countryside Service team and Natural Resources Wales , DCC Climate change project team and the local community of Rhyl . |

Positive impacts identified:

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| Biodiversity and the natural environment | The project will be carried out in a way that ensures that are minimal negative impacts on the natural environment. |
| Biodiversity in the built environment | There may be opportunities to improve biodiversity in the built environment. |
| Reducing waste, reusing and recycling | Flooding of properties creates a large amount of contaminated, non-recyclable waste. The project will reduce this likelihood. |
| Reduced energy/fuel consumption | Post flood clear up operations use a considerable amount of energy/fuel, this project will reduce that. |
| People's awareness of the environment and biodiversity | There are strong links between flooding and climate change (sea level rise). The project will draw these issues to the attention of Denbighshire residents. |
| Flood risk management | The project will reduce the likelihood of flooding in Central Rhyl. |

Negative impacts identified:

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|---|--|
| Biodiversity and the natural environment | |
| Biodiversity in the built environment | |
| Reducing waste, reusing and recycling | |
| Reduced energy/fuel consumption | |
| People's awareness of the environment and biodiversity | |
| Flood risk management | |

A healthier Denbighshire

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| Overall Impact | Positive |
| Justification for impact | The project is likely to result in improved opportunities for beach based leisure activities for all users as an access ramp is proposed to be constructed onto the beach is part of the design and will have a beneficial impact on the mental well-being of residents currently at risk of flooding. |
| Further actions required | By working with local residents and community groups as the project develops to ensure that residents fears and concerns are recognised and addressed. |

Positive impacts identified:

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| A social and physical environment that encourage and support health and well-being | A promenade that has less likelihood of flooding will encourage physical activity on it ie walking, cycling etc. |
| Access to good quality, healthy food | N/A |
| People's emotional and mental well-being | Peoples concerns and fears of being flooded have a significant impact on their emotional and mental well-being. The project will significantly reduce this likelihood. |
| Access to healthcare | N/A |
| Participation in leisure opportunities | There's an opportunity to improve the access onto the existing beach at Central Rhyl, which will encourage greater use for physical activity by residents and tourists. |

Negative impacts identified:

| | |
|---|--|
| A social and physical environment that encourage and support health and well-being | |
| Access to good quality, healthy food | |

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|---|--|
| People's emotional and mental well-being | |
| Access to healthcare | |
| Participation in leisure opportunities | |

A more equal Denbighshire

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| Overall Impact | Positive |
| Justification for impact | The project will have the greatest positive impact on the most vulnerable members of the community. |
| Further actions required | n/A |

Positive impacts identified:

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| Improving the well-being of people with protected characteristics. The nine protected characteristics are: age; disability; gender reassignment; marriage or civil partnership; pregnancy and maternity; race; religion or belief; sex; and sexual orientation | People with protected characteristics are our most vulnerable residents during a flood event. Reducing the risk of flooding will improve their well-being. |
| People who suffer discrimination or disadvantage | They will be able to use the promenade and live in Rhyl without fear of flooding. |
| People affected by socio-economic disadvantage and unequal outcomes | One of the consequences of flooding is high insurance costs, which could result in poverty. The project could make properties cheaper to insure. |
| Areas affected by socio-economic disadvantage | Tourism will be better protected without the fear of flooding therefore helping the area of Rhyl's businesses and residents working in Rhyl. |

Negative impacts identified:

| | |
|---|--|
| Improving the well-being of people with protected characteristics. The nine protected characteristics are: age; disability; gender reassignment; marriage or civil partnership; pregnancy and maternity; race; religion or belief; sex; and sexual orientation | |
| People who suffer discrimination or disadvantage | |
| People affected by socio-economic disadvantage and unequal outcomes | |
| Areas affected by socio-economic disadvantage | |

A Denbighshire of cohesive communities

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| Overall Impact | Positive |
| Justification for impact | Reducing flood risk will improve the strength and long term viability of the community. |
| Further actions required | n/a |

Positive impacts identified:

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| Safe communities and individuals | Following previous flood events, crime e.g., burglary, has been an issue during the recovery phase. Reducing the likelihood of flooding will have a positive impact. |
| Community participation and resilience | There is already a strong community in Central Rhyl, with a good knowledge of flood risk. The community will be engaged with as the project develops. |
| The attractiveness of the area | |
| Connected communities | Any flooding could disrupt the connectivity to broadband and travel infrastructure, therefore reducing the likelihood of flooding will reduce this issue. |
| Rural resilience | Reducing the likelihood of flooding will help build a resilient rural community. |

Negative impacts identified:

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|---|--|
| Safe communities and individuals | |
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| Community participation and resilience | |
| The attractiveness of the area | |
| Connected communities | |
| Rural resilience | |

A Denbighshire of vibrant culture and thriving Welsh language

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| Overall Impact | Neutral |
| Justification for impact | n/a |
| Further actions required | n/a |

Positive impacts identified:

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| People using Welsh | |
| Promoting the Welsh language | Welsh policy implemented on the construction site |
| Culture and heritage | |

Negative impacts identified:

| | |
|-------------------------------------|--|
| People using Welsh | |
| Promoting the Welsh language | |
| Culture and heritage | |

A globally responsible Denbighshire

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| Overall Impact | Positive |
| Justification for impact | The project will maximise the use of the local supply chain, including employment, skills and materials. |
| Further actions required | n/a |

Positive impacts identified:

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| Local, national, international supply chains | It's likely that the project will maximise the use of the local supply chain. |
| Human rights | Procurement will be carried out with due cognisance of human rights law. |
| Broader service provision in the local area or the region | |
| Reducing climate change | |

Negative impacts identified:

| | |
|--|--|
| Local, national, international supply chains | |
| Human rights | |
| Broader service provision in the local area or the region | |
| Reducing climate change | |