Impact of a Nuclear Waste Repository Facility on Perceptions of West Cumbria

Draft Final Report

Managing Radioactive Waste Safely Partnership

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westcumbria:mrws

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Contents

Executive Summary

1. Introduction

In late 2010, the Managing Radioactive Waste Safely (MRWS) Partnership commissioned GVA to undertake qualitative research to understand the potential impact on perceptions of West Cumbria and other parts of the county, should plans for a geological disposal facility (GDF) progress. The aims of this research were to understand the perspectives of current and prospective residents, visitors, businesses and potential investors of any development of this nature covering a range of themes spanning 'place', 'prosperity' and 'people'.

The intention is that this commission complements emerging quantitative research being undertaken by the Britain's Energy Coast Board and the Nuclear Decommissioning Authority's generic Strategic Environmental Assessment.

2. Approach and Method

The findings of this report are driven primarily by primary research undertaken with residents, visitors and businesses across Cumbria between January and April 2011. A mix of engagement techniques were used to gather the perceptions of each group including:

- For **residents**:
  - An on-street survey of 377 residents of West Cumbria across nine main locations; these were 5-7 minute interviews exploring the impact of the GDF on: quality of life, employment, economy, housing, environment, transport, health, skills, migration, community cohesion and the availability of public services;
  - 5 residents focus groups covering similar themes in a number of locations and with different audiences spanning young people, older people and the rural community;
  - 8 interviews with local property agents and registered social landlords (RSLs) to explore the housing and commercial property impacts of a GDF; and
  - Focus groups with police and health professionals to discuss perceived impact on these areas.
- For **visitors**:
  - An on-street survey of 363 visitors at a number of locations across Cumbria (including major Lake District hubs); these were 3-5 minute interviews exploring quality of destination, transport, environment, tourism levels and spend, and the availability of visitor services; and
  - 16 structured interviews with tourism attractions, representative groups and stakeholder organisations discussing similar themes.

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- For **businesses and investors**:

  - Over 20 face-to-face and telephone interviews with business representative organisations exploring: general perception, impact on the economy; views on West Cumbria as a place to do business, supply chain effects and implications for skills, infrastructure and services; and

  - 7 business workshops attended by over 100 organisations operating across a variety of sectors covering similar themes.

The majority of this research was undertaken in February 2011, before the events that took place in Japan, and hence it is unlikely that these have skewed findings in any way.

This primary research has been complemented by the development of a series of case studies examining the perception of other major infrastructure projects, including several within the nuclear industry, including documenting how these were measured and opinion captured.

3. Resident Perceptions

The residents of West Cumbria, and those representing specific elements of the community, held wide ranging perceptions in relation to the GDF which are summarised below.

General Population

- Current perception of **quality of life** is strong at present with around 75% of the sampled population believing West Cumbria is a 'good' or 'excellent' place to live.

- Around half of those interviewed believed that the GDF would have no impact on this, the other half split almost equally between those thinking it would enhance quality of life and those believing it would get worse.

- There was significant spatial variation between different parts of the area, with those living further north and east (e.g. in Wigton and Keswick) holding more negative views than those living in, for example, Egremont or Workington.

- Perceived impact on both the availability and quality of **jobs** was positive with 80% believing there would be more jobs, and 70% thinking these would be superior to those currently available.

- This translated into views on **business**, with 65% believing that there would be an improvement to general business performance, and 6 in 10 thinking that more new investment would flow into the area.

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- Just under half of all residents could see no possible impact on **house prices**, but as many seeing an increase as a decrease as a result of the GDF. The ability to sell is more of a concern with a third of residents believing that could be an issue post GDF.
- Whilst over half of residents perceived no impact on the **environment**, 40% have some concerns around noise, ecology and the landscape.
- Views on **transport** and access were mixed. Whilst 40% could see no impact, the rest of the sample was split between those believing that "there would have to be an investment" and hence roads and rail would improve, and others that could only see increased congestion.
- The provision of **skills**, the **retention** of the existing population and attraction of new people were seen as being generally positive outcomes of the GDF. Over half of those sampled believed that it would help retain young people in the area and would attract new in-migrants.
- Around 70% of those interviewed could see no **health** issues. The vast majority could see no major impact on community cohesion or crime levels.
- Whilst most (70%) could see no real impact on **public services**, around 20% of interviewees believed that they would be improved as a result of investment in the area.

Young People

- There is an expectation that the nuclear industry will be the main source of **good quality jobs** in the future, and hence that GDF is an important component in attracting investment and retaining young people.
- The perception is that many of the top jobs will be imported, and that the emphasis needs to be on investment in the **skills** of local people.
- There is a slight concern, however, that the nuclear industry is considered the **only option for the area**, and that this will further 'pigeon hole' West Cumbria.
- There is only very **limited concern about any health or environmental risk**, with reference made to the long standing presence of Sellafield.

Older People

- There is concern about the **level of understanding** of GDF and the ability of the public to take a view.
- Given past experience, the view is that it is imperative that the area learns lessons and addresses **gaps in infrastructure**, housing and public service provision.

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- Linked to this, the 'boom and bust' of the 1980's must be avoided – any benefits created should be **sustainable** and managed.
- Acknowledgement that local people will always place **economic considerations above health** and environmental factors, but also clear that the location is fundamental to its acceptance.

The Rural Community

- There is a view that there is a **general lack of information** about the GDF or the MRWS process.
- General concerns about the impact on the **landscape and on property and land prices**. Particular concern in relation to leaks similar to the alleged contamination at Sellafield.
- Real and widespread fear that the jobs and investment created will **flow out of the area** and not be channelled to local people.
- There is a significant concern that other, non-energy, industries might suffer due to the **ongoing link to the nuclear industry**.

Prospective Residents (via Estate Agents and RSLs)

- In general, **housing demand will increase** as investment is injected into the area. This will increase owner occupation and rental demand, and release development sites and housing land.
- The perception is that the GDF will increase the **demand for mid-range and executive housing** related to highly skilled in migrants.
- There will also be a significant boost in rental demand in the **construction phase**, in the proximity of the development. Historically these have congregated around Workington and Whitehaven. Some agents suggested that property in the immediate proximity of the GDF would be harder to sell.
- These will both be **tempered by a drop in 'lifestyle'** in-migration, with fewer retirees and second homes.

Police and Health Professionals

- GDF will **increase population**, which has implications for crime, community safety and health provision. Local communities are still suffering from the tensions and generational issues resulting from the 1980's 'boom years'.

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- The Police would be concerned with increased demand due to ongoing **budget cuts and resulting capacity issues**, but risks can be mitigated with appropriate partnership working, adequate infrastructure investment and sufficient time to plan.
- The PCT indicated **no direct health concerns**, and perceived that the community would actually get healthier if employment levels rose and people were happier. The increased demand due to the population rise would be manageable if there was time to plan.

In summary, there is no general consistent view amongst residents in relation to the GDF. Each individual comes from a different background and has different priorities and knowledge of the subject matter.

The general population is divided, but agree on one main factor: employment. 77% of all respondents felt that the biggest advantage of the GDF was its ability to create employment in the local economy. When asked for a single largest disadvantage, some stated the impact on the environment (18%), some the effect on tourism (16%) and some the health implications (14%).

When looking at specific groups, perception is more polarised. Young people were generally positive, seeing the benefits of high quality sustainable jobs as key. Older people were more cautious, remembering the disruption of the construction period decades ago, stating the environmental and health risks, but being pragmatic and acknowledging the substantial economic opportunity. The rural population were understandably negative, seeing a direct impact on the landscape and on rural activities and tourism.

Consistent views across all groups include the need to:

- provide adequate road, rail and housing infrastructure for the GDF;
- ensure that jobs and supplier contracts are channelled to local people and businesses, by making sure that there is investment in skills and to support the local supply chain;
- continue to engage with the community in a partnership approach; and
- allow sufficient time and resources to plan public services carefully.

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4. Visitor Perceptions

The existing view of Cumbria as a place to visit is strong, with a world class destination in the Lake District, and high return rates for visitors. There exists, however, strong differentiation between the Lakes and the Coastal area. Views on how GDF would impact the views of visitors are summarised below.

Tourists

- There is a **strong baseline position** with 99% of visitors having a strong perception of Cumbria and 75% a strong view of West Cumbria
- 36% of visitors feel that Cumbria would be negatively impacted by a GDF, whilst 42% feel that West Cumbria would be a worse place to visit.
- Around as many people (25%) believe that **roads** would be better as a result of the GDF (due to more investment) as believe increased congestion would be an issue. Conversely, the overwhelming majority saw no change in public transport.
- The **environmental impact** was a concern. 60% of those interviewed believed that there would be an adverse impact on noise, ecology and landscape.
- 4 in 10 visitors felt that the GDF would impact on the **number of tourists**, with 36% believing that there would be reduced tourism spend within the county. A third of all those surveyed felt that there would be an impact on the 'cultural heritage' of the area.
- Broadly, there was **little perceived impact on tourism services**. Over 15% expected that the provision of restaurants, hotels and retail would improve with increase investment in the local economy.

Tourism Groups and Stakeholders

- Whilst agreeing that there could be an impact on tourism, there is also a general acknowledgement of **the need to take responsibility** for our waste storage in the UK.
- Views would clearly **depend on the specific location** of the GDF and its relative location to tourist hubs. There would be significant opposition to a facility within the national park.
- There is common feeling that the **media** would have a substantial impact on perception and hence on the visitor economy, and the management of messages is crucial. The protection of the Lake District brand is essential.

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- The perception among many is that the nuclear industry could 'give something back' to **counteract bad publicity**. This could include investment in education or community facilities. Any benefits of the GDF should not just be felt in the immediate vicinity.

Accommodation and Tourism Service Providers

- In this group there is, in general, a **strong opposition** to a GDF. The main argument is that the impact on the tourist industry in Cumbria would out-weigh any benefits felt in energy related sectors.
- There is also significant concern over the **level of information** people are receiving with which to make a decision.
- An **alternative approach** to economic growth on the Coast was consistently tabled: link the tourism offer in the Lake District to coastal areas better, diversifying the economy. A GDF could jeopardise this.
- Also common is this group was to highlight **environmental concerns** including the perception that tourists would have around safety and health risks. This view suggested that "nuclear anything" creates a ripple effect.
- A further common perception amongst this group was the fear that the construction period would bring with it **significant disruption, noise and landscape impacts.**

There is general concern amongst visitors, businesses operating in the tourism industry and wider stakeholder organisations in relation to the GDF. When asked about the single main advantage of the GDF, 48% of tourists referred to employment creation and the benefits to the economy. Stated 'largest' concerns included the impact on the environment (24%), health risks (23%) and the impact on the tourism industry (19%). These are the key reasons why around 4 in 10 people think the area will be a worse place to visit post the creation of a GDF.

Whilst the overall view of visitors and those that work with and represent them is more negative to those of residents, the strength of this perception is clearly driven by:

- the choice of a location for the GDF and the relationship between this and core visitor areas;
- the influence of the media and the way that communication in relation to the GDF is managed the local tourism 'brand' protected; and
- the strength of partnership working and engagement with key stakeholders and representative groups.

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5. Business and Investor Perceptions

The overall perception of West Cumbria from a business perspective is that the nuclear industry remains the largest single attraction for inward investors, and its supply chain dominates the economy. Concerns exist, however, that the area is over reliant on nuclear, and that it lacks a diversity of skills base and negative external perception amongst the business community.

Existing Businesses

- There is **no overall consensus** on the extent to which a GDF will create direct additional jobs for local people. A lack of understanding on the number and quality of employment and the extent to which labour will be imported limits the depth of perceptions in relation to the economy.
- Providing that the jobs are there, businesses agree that this offers a **huge opportunity** for the local area, in terms of growing enterprises, retaining people and creating wealth in West Cumbria.
- For the GDF to have the greatest impact interviewees suggest that there is the need to develop the **capacity of existing businesses** to be able to engage in the supply chain.
- The other main element is **skills**. In general, businesses feel that there is need for investment in the form of tailored courses or apprentice programmes to ensure that the area is well equipped to supply the labour to the GDF.

Potential Investors (via public/private stakeholders)

- Reference was made to the fact that the GDF is part of a **series of major schemes** which have the potential drive significant and sustainable investment into West Cumbria over the next thirty years.
- Comment was made that there is the potential to tie the GDF **closer to other proposals** currently being worked up including the possible New Build and the University of Manchester Dalton Research Institute. This would create a coherent and attractive impression of a 'cradle to grave' sector rather than the development of a 'dump' in isolation.
- Also acknowledged, however, was that the GDF will attract a lot of **negative publicity** which will need to be managed. Investors would not be attracted to the 'nuclear coast'.
- It is generally thought that supporting **infrastructure** is key to this development and that the existing transport network is not fit for purpose. There are further opportunities to develop related industries around the ports, roads, rail and broadband provision.

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The GDF is seen perceived to be generally positive amongst the business community, with potential to boost the economy, strengthen supply chains and attract investment. The factors within this that have been identified as being particularly important are:

- The need for an honest dialogue with industry and the public and a clear presentation of the facts as they are established. Maintaining a dialogue with local businesses to support them to capitalise on the opportunities that emerge through the supply chain;
- Ensuring that the benefits to the local economy are maximised by creating an appropriately skilled workforce – and there must be clarity on the size of opportunities and the extent to which they are available to local businesses; and
- Providing suitable supporting infrastructure to minimise disruption and support the development of complementary sectors, ensuring that the reliance on the nuclear industry is not compounded.

6. Lessons from Elsewhere

In order to understand some of the lessons learned elsewhere around the perceptions of major schemes, six projects of comparable scale and complexity have been analysed. Three of these projects were in the UK (Sizewell B, The Channel Tunnel and Ince Resource Recovery Park) and three overseas (Östhammar Nuclear Waste Repository – Sweden, Olkiluoto Nuclear Waste Repository – Finland, and Meuse and Haute Marne Underground Resource Laboratory - France).

Taking these projects together, the combined lessons for West Cumbria are that:

- Areas with a strong nuclear or industrial heritage will be more hospitable to a GDF or similar scheme, but that support should not be taking for granted. A close partnership approach to working should be adopted from the outset;
- Open, honest and consistent communication, using a range of engagement techniques, and with all parties, is important in the process. This can help to generate support and balance the negative publicity that often accompanies major projects. Communication of how similar facilities overseas have been developed could also help.

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- Rapid response to public concerns can help build faith in the process. This includes fully transparent technical appraisals relating to key issues around health, environmental and transport impacts;
- The technology proposed should be made clear and all other options for consideration presented. The more information that residents, businesses and visitors have the more able they are to take an informed view; and
- Once works begin, the engagement process needs to be maintained and monitored. The construction period is sensitive and ongoing assessment of perception is important.

Whilst this is a diverse range of projects, these consistent lessons provide a useful steer for West Cumbria. Full case studies accompany the main report in Appendix A.

7. Conclusions

This research has identified a wide range of positive and negative perceptions relating the GDF, driven by personal experience and circumstance and the level of knowledge and interest in the issues that a facility of this nature can influence.

From a 'place' perspective, the specific location of the site will be a key determining factor as to how people perceive the facility. For example, views on it will clearly differ if it is located in coastal areas, where nuclear related industries are broadly accepted and embraced, as opposed to inland, where they could be seen as a threat to tourism, farming and related industries. Amongst many, environmental issues are a concern, whilst others see the necessary infrastructure and investment associated with the development as being a significant benefit.

When considering 'prosperity' it is clear that there is significant opinion that the GDF has the potential to generate large volumes of high quality, sustainable employment in a part of the country where new jobs are needed. Furthermore it is seen as benefiting existing businesses, by providing supply chain opportunities and injecting cash into the local economy. There is caution, too, in regard to the economic contribution. Concerns exist in relation to the trade off between a prosperous nuclear-driven economy and efforts to further develop the tourism offer in West Cumbria and the rest of the County, and some are nervous that the area is becoming ever more reliant on one sector.

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Where there is consensus is in the need to ensure that the employment created is retained locally, with suitable investment in skills, and that local businesses are well equipped to exploit the opportunities that arise.

In terms of the 'people' dimension, there is a broad view that the GDF could have the positive effect of helping to retain young people and attract new migrants. Health concerns exist, however, in general amongst visitors rather than residents. There appears to be limited perceived impact on the level of crime, on community cohesion or the availability of key services.

Clearly partnership working is going to be critical the further development of proposals in relation to a GDF in West Cumbria, to ensure that the views of residents, visitors and businesses are accommodated. As well as building consensus, this will help to ensure that the benefits of a facility, if ultimately located in West Cumbria, are retained in the area, and that negative impacts are minimised.

1. Introduction

This section introduces the research, providing an overview of its purpose, and the context in which it sits.

1.1 Overview

In late 2010, the Managing Radioactive Waste Safely (MRWS) Partnership commissioned GVA to undertake qualitative research to understand the potential impact on perceptions of West Cumbria and other parts of the county, should plans for a geological disposal facility (GDF) progress.

The GDF proposal is a long-term process. West Cumbria has expressed initial interest in hosting a site but there is an extensive Public and Stakeholder Engagement (PSE) process ahead of the MRWS Partnership making any recommendation on a decision to participate by Copeland and Allerdale Borough Councils and Cumbria County Council. This will be supplemented by further research and technical studies into the potential and actual impacts of a GDF.

No site has been identified for a GDF, although if the process progresses then this will be limited to Allerdale and Copeland within suitable areas identified by the British Geological Survey.

The research, therefore, primarily focused on these areas but also considered the impact on perceptions in other areas due to the potential impact related to their geographical proximity and the surface facilities required for a GDF.

The long-term nature of the process will also necessitate a series of in-depth future impact studies. This work is intended to be primarily qualitative in its nature and rather than measure impacts, provide an initial 'snapshot' of perceptions and how these may change over time. This may form the basis for future impact measurement studies.

The intention is that this research complements emerging quantitative research being undertaken by the Britain's Energy Coast Board and the Nuclear Decommissioning Authority's generic Strategic Environmental Assessment.

1.2 Format of this report

The remainder of this introduction presents the aims and objectives of this commission, and sets the strategic context to the work undertaken.

The rest of the document is structured as follows:

1. Introduction

Section 2 discusses the strategic approach adopted to deliver this research;

Section 3 details the research methods used and the size and breadth of sample achieved;

Sections 4- 6 discuss the perceptions of residents, visitors and businesses; and

Section 7 summarises our findings into a series of conclusions

The appendices accompanying this document include a series of case studies from elsewhere.

1.2 Aims and objectives

The aims of this research were to understand the perspectives of current and prospective residents, visitors, businesses and potential investors of any development of this nature within West Cumbria.

There are multiple methods to categorise perceptions and impact of this type of major infrastructure development and a significant number of associated indicators.

We have therefore categorised the potential impact on perceptions according to the three key aims of the State of West Cumbria report:

- **Place** – making West Cumbria a better place for successive generations.
- **Prosperity** - making West Cumbria prosperous.
- **People** – raising people's aspirations for themselves and for West Cumbria.

Within each theme, it a key objective of the study to explore a range of indicators spanning 'place', 'prosperity' and 'people' with each of the three target groups, as illustrated below.

Place	Prosperity	People
- Quality of Life - Property Market - Services - Accessibility - Environmental - Identity	- Employment - Economic Growth - Tourism - Skills	- Population - Demographics - Health & Wellbeing - Community Cohesion

It was also a key objective of this research to consider the timescales over which any potential GDF development will be delivered in West Cumbria.

Within each of the three target groups, we therefore explored where perceptions may change over time during three key phases of any development:

- Pre-development phase
- Construction phase
- Operational phase

1. Introduction

1.3 Strategic context

National Strategic Context

The current status of the UK programme towards the development of a GDF for higher activity radioactive waste is widely documented. The types and breadth of the wastes which may eventually be routed to a repository are understood in significant detail, as is the huge technical challenge which is faced. There is also an appreciation of the multitude and range of stakeholder issues involved in a project of this complexity, duration and of both local and national interest.

The UK government launched a search for a GDF site following the publication of the 2008 White Paper. Any facility will not be operational until circa 2040 and will ultimately be designed to accommodate a large proportion of the UK's higher activity wastes including intermediate level waste and potentially some previously decayed stored higher level waste material. Any facility would be operational for many decades as material is routed to it from Sellafield and other UK nuclear facilities.

The MRWS Partnership

It is recognised that West Cumbria has a significant role in the UK nuclear industry and that a significant quantity of the UK's radioactive waste inventory is currently held in surface stores at Sellafield. Due to this history, Copeland, Allerdale and Cumbria County councils have started an engagement process with the government and with the general public and stakeholders to inform their decision on whether to participate in the GDF development process. It is the only area to have done so nationally following an invitation to all local authorities to voluntarily participate in the early engagement stages.

The MRWS Partnership has been established between the three councils and a wide range of local and national stakeholders, with the aim of gathering information and views. The aim of the partnership will be to make a recommendation to the councils as to whether or not to participate in the GDF process further. The partnership has set out to consult with private and public sector interests in West Cumbria and wider afield and has implemented a comprehensive three-stage Public and Stakeholder Engagement (PSE) programme.

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Round One of the PSE programme is complete and has raised awareness of the GDF process in Cumbria and the role of the MRWS Partnership in terms of informing any decision to participate. This study is intended to be delivered alongside PSE Round Two that is currently being undertaken. This will support the transition of focus from awareness raising to ascertaining the potential impacts of any GDF development over time. The MRWS Partnership will use the qualitative findings on perceptions of West Cumbria, and how these could be affected by GDF, as the basis for potential future work on the scale of these impacts.

Perceptions of West Cumbria

The effects of the siting of nuclear installations and radioactive waste facilities are well recognised both within the UK and internationally. These are highly sensitive types of development that require careful management to ensure that both safety concerns, and the direct impacts on the areas in which they are sited, are addressed. It is also necessary to consider the potential stigma associated with the siting of such a facility and effect of perceptions across a range of social, economic and environmental indicators.

The concentration of the nuclear industry in West Cumbria is well-documented with the presence of the Sellafield Nuclear Facility, its co-located supply chain industries, and additional facilities such as the Low Level Waste Repository (LLWR). The dependency of the local economy on Sellafield in terms of jobs, economic multiplier and supply chain effects has both benefits and disbenefits, which manifest themselves in terms of both local and wider perceptions of the West Cumbria area:

"West Cumbria is seen at least by a proportion of its residents as stigmatised in the eyes of the rest of the country by its perceived servile dependent relationship to the nuclear industry…exacerbated by the perception that West Cumbria has been the only place in the country compliant and dependent enough to accept it."

It is considered that this stigma creates a dependency on the nuclear industry that is intensified by its historical dominance combined with West Cumbria's geographical isolation – and that this has led to its relative economic and social disadvantage. This is exacerbated by a perception that there has been a lack of compensation to the area provided by Central Government in terms of infrastructure development, for example facilities for transport, education, and leisure.

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It was therefore a key task of this study to ascertain the impact of a GDF development on these existing perceptions of West Cumbria – and how these perceptions may change during the pre-development, development, and operational phases of such a facility. Critical to this was exploring whether existing perceptions compare to previous research - and how GDF development may intensify this. Studying perceptions will also enable the MRWS Partnership to establish the perceived impacts of the GDF and the extent to which these will require further in-depth exploration during subsequent studies. This study has therefore contributed to this process by providing an initial snapshot of perceptions and how these may change.

Impacts

Perceptions of West Cumbria (across the target groups for this research) in relation to a GDF are likely to be informed by the potential impacts of such a facility across a number of indicators. They are also split between the perceptions and impacts for local residents and businesses, and the perceptions of West Cumbria incoming tourists and investors, which may have a consequential impact on the local economy and other indices.

This study focused on perceptions and what drives these (in terms of perceived impacts). Impacts have been explored in a number of ways and it is clear that they are dependent on where a facility is located, the types of waste(s) being managed and the design of the site and associated buildings. Impacts are considered to be similar to those for large-scale infrastructure developments and have a number of defining characteristics , which can be summarised as follows:

- Direct/Indirect
- Secondary/Cumulative
- Short/Medium/Long Term
- Temporary/Permanent
- Positive/Negative

Impacts of a GDF can be categorised in a number of ways and broadly encompass physical (visual, landscape, land use), environmental (air quality, climate, water quality, ecology), social (health, community cohesion, quality of life) and economic (job creation, skills, training, inward investment) impacts. The Nuclear Decommissioning Authority has undertaken a generic assessment of impacts across sixteen key sustainability themes – however the generic nature of this assessment is due to a site not being selected at this stage and the need for specific impacts to be identified on a site-specific basis.

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Therefore, this research will support the MRWS Partnership in the identification of how perceptions of West Cumbria will be affected by the GDF proposals and the potential impacts that are driving these perceptions. This will enable the commissioning of further specific research into these impacts and allow them to be measured locally to further inform the MRWS Partnership in making a recommendation to the councils on their 'decision to participate' in the next stage of the GDF process.

2. Approach

This section outlines the approach adopted in capturing the perceptions of a GDF in West Cumbria.

2.1 Methodology

Figure 2.1 illustrates our five-phase approach to the delivery of this commission.

Phase 1 was a planning phase which included a full review of all available contextual information and the production of an Intelligence Gathering Framework to structure the delivery of Phase 2.

Phase 2 involved a range of primary intelligence gathering activities to explore the impact on perceptions of West Cumbria with the six target groups identified through a mixed methods approach.

Phase 3 identified six case studies of comparator sites with desk-based research to identify the key lessons for the MRWS Partnership in terms of ongoing perceptions and impacts management.

Phase 4 included the detailed analysis of all intelligence gathered to enable the reporting and presentation of the research findings.

Figure 2.1: Our approach

PHASE 1 PLAN	• Inception Meeting • Contextual Analysis • Sampling • Intelligence Gathering Framework
PHASE 2 INTELLIGENCE GATHERING	• Existing Residents (Survey/Focus Groups) • Potential Residents (Interviews with Estate Agents and RSLs) • Existing Tourists (Survey) • Potential Tourists (Stakeholder Interviews) • Existing Businesses/Potential Investors (Stakeholder Interviews) • Police and health (Focus Groups)
PHASE 3 BENCHMARKING	• Six case studies of comparator sites in the UK and internationally • Identification of key lessons learnt for West Cumbria
PHASE 4 REPORTING	• Analysis of quantitative and qualitative findings • Emerging Findings Presentation • Draft Report • Executive Summary • Presentation to MRWS Partnership

3. Research activities

This section details the research activities employed, outlining target audiences, engagement techniques and themes discussed.

3.1 Target groups

The findings of this report are driven primarily by primary research undertaken across Cumbria between January and April 2011. A mix of engagement techniques were used to gather the perceptions of each of the three target groups for the research:

- Existing and potential residents
- Existing and potential visitors
- Existing and potential businesses / investors

A mix of surveys, focus groups, workshops and interviews have been undertaken to cover these three groups and this is detailed below.

It should also be noted that the vast majority of data collection has been undertaken prior to the Japan Earthquake and associated nuclear leak and this has therefore not skewed our findings given its potential impacts on perceptions.

3.2 Residents

We delivered an on-street survey of 377 residents of West Cumbria across nine main locations. The survey was carried out Friday 18 February – Mon 22 February and Monday 7 March – Tuesday 8 March.

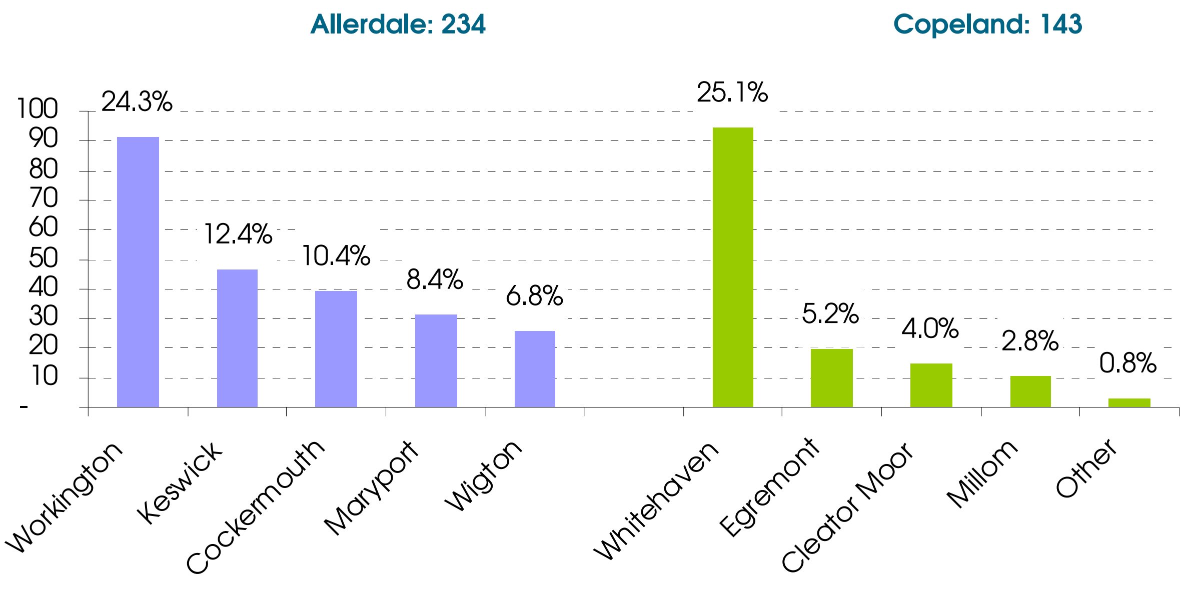
Interviews of between five and seven minutes were undertaken, supported by visual reference points. The questions explored perceived impact on:

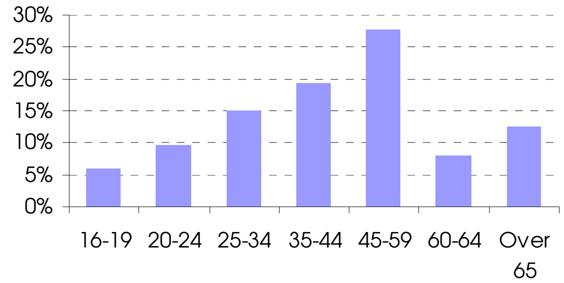
- Quality of life;
- Housing;
- Transport and access;
- The environment;
- Employment and economy;
- Skills and migration;
- Health and wellbeing;
- Community cohesion and crime; and
- Availability of services.

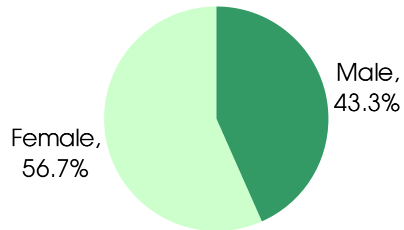
Figure 3.1 illustrates the distribution and profile of the survey sample.

3. Research activities

Figure 3.1: Residents survey distribution, age and gender profile







In addition to the survey, we delivered five residents focus groups covering similar themes in a number of locations and with different audiences spanning young people, older people and the rural community. This ensured that we obtained the views on a qualitative basis of a further cross-section of residents.

To explore impacts on perceptions of potential residents, we have also delivered eight interviews with local property agents and registered social landlords (RSLs) to explore the housing and commercial property impacts of a GDF. Focus groups and interviews have also been held with police and health professionals to discuss perceived impact on these areas.

3. Research activities

3.3 Visitors to Cumbria

We delivered an on-street survey of 363 visitors at a number of locations across Cumbria.

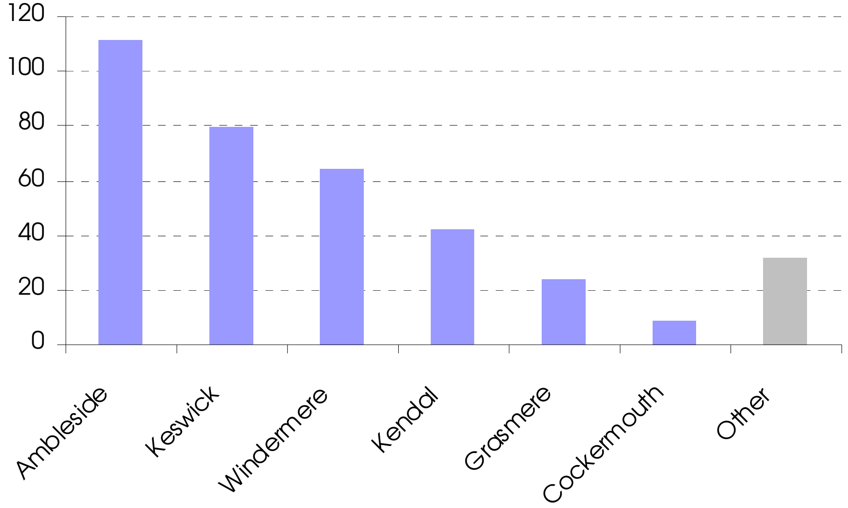
The survey was delivered Friday 18 February – Tuesday 23 February and Monday 7 March - Wednesday 9 March.

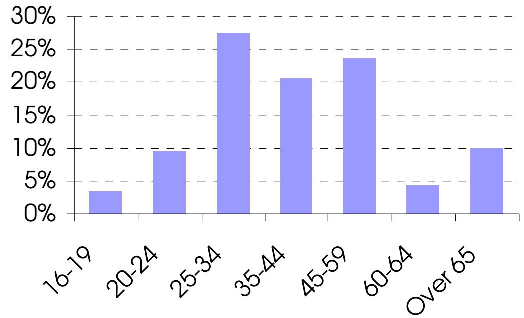
Figure 3.2 illustrates the profile of the sample.

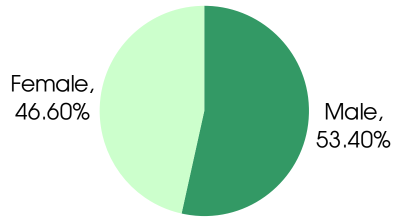
Interviews of between five and seven minutes were undertaken, supported by visual reference points. The questions explored perceived impact on:

- Quality of destination;
- Access and transportation;
- Environmental factors;
- Levels of visitor spend;
- Crime; and
- Availability of services.

Figure 3.2: Visitor survey distribution, age and gender profile







3. Research activities

In addition, we have delivered structured interviews or workshops with the following organisations to identify perceptions of the impact of a GDF on tourism:

- Lake District National Park Authority;
- Friends of the Lake District;
- British Holiday and Home Parks Association;
- South Copeland Tourism Group;
- Cumbria Tourism;
- The Field Studies Council;
- Campaign for National Parks;
- Western Lake District Tourism Partnership;
- Solway Coast AONB,
- CLA

3.4 Businesses and investors

Face-to-face and telephone interviews have been delivered with business representative organisations exploring: general perception; impact on the economy; views on West Cumbria as a place to do business; supply chain effects; implications for skills; infrastructure; and services. Residents and visitors were also asked their view on how they feel the GDF would affect business growth and investment.

Interviews were delivered with:

- Institute of Directors
- NWDA
- UKTI
- Invest in Cumbria
- West Cumbria Development Agency
- Cumbria Social Enterprise Partnership
- University of Cumbria Energy Coast Campus
- Cumbria Green Business Forum
- Energy Coast Business Cluster
- Cumbria Chamber

Workshops were also held to obtain the views of businesses across different sectors and geographies with the following:

- Millom Business Breakfast Group
- Cumbria Chamber Networking Lunch Group
- British Holiday Home and Parks Association
- Furness Enterprise National Parks Association Business Taskforce
- Federation of Small Businesses

4. Residents perceptions

This section presents the findings of engagement activities with residents.

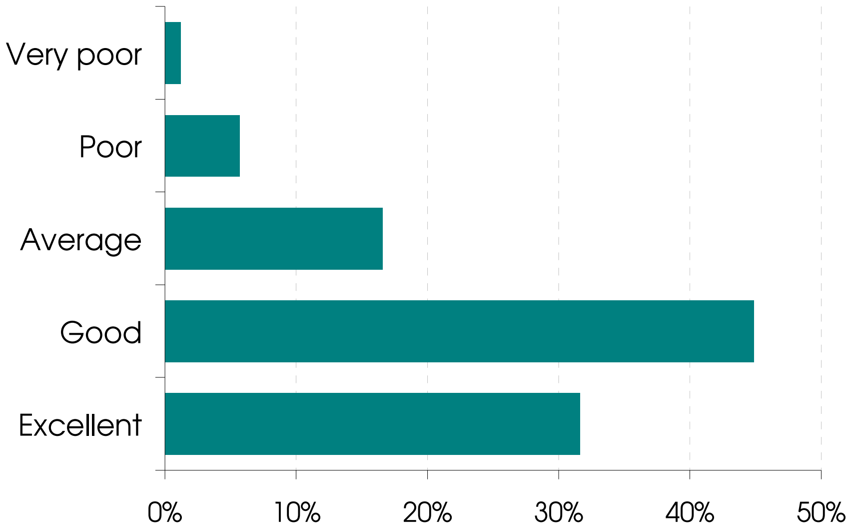
4.1 Introduction

Perceptions of residents, both existing and potential, are a significant consideration in relation to any GDF development. Analysis of the intelligence gathered during the research provides useful insights into perceptions of impact and how this varies across different key indicators.

4.2 Quality of life

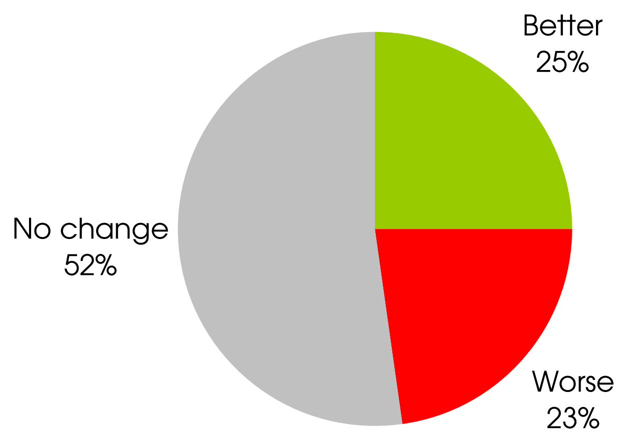
Overall, current perception of quality of life is strong with around 75% of the sampled population believing West Cumbria is a 'good' or 'excellent' place to live. Opinion is divided as to how the GDF will influence this. Around half of those interviewed believed that the GDF would have no impact on this, the other half split almost equally between those thinking it would enhance quality of life and those believing it would get worse.

Figure 4.1: Current perception on quality of life in West Cumbria



Don't know: 6 responses

Figure 4.2: Impact of a GDF on quality of life



Don't know: 3 responses

4. Residents perceptions

Figure 4.3 shows that there is significant spatial variation between different parts of West Cumbria in relation to the impact of a GDF development on quality of life.

Residents of Workington, Cleator Moor, Egremont and Cockermouth were most positive in relation to the impact on quality of life. In contrast, residents of Maryport, Wigton and Keswick were the most negative. For example, in Keswick, almost half of respondents took the view that the GDF would be a bad influence on quality of life. Responses in Whitehaven were, on average, neutral.

It is clear that those living further north and east hold more negative views on the potential GDF development than those living in the south and west of the area. It is apparent that those living in closer proximity to Sellafield have the least negative perceptions of a GDF in terms of its impact on quality of life.

Figure 4.3: Spatial variation in views on quality of life

4. Residents perceptions

4.3 Employment

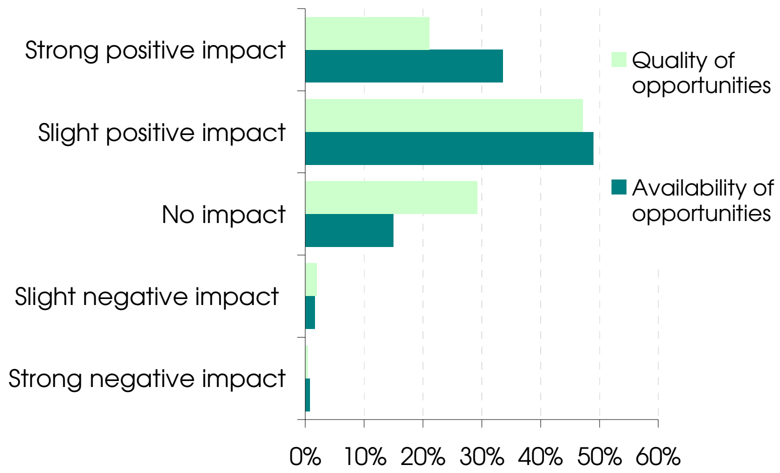
The perceived impact of any GDF development on the availability and quality of employment was overwhelmingly positive. 80% of residents believe there would be more jobs, and 70% think that these jobs would be superior in quality to those that are currently available. This is perceived amongst residents as the most positive aspect of any GDF development.

4.4 Business and economy

Linked to the perceptions regarding job creation and quality of jobs, there is also a generally positive perception of the potential impact on businesses. Over 65% expect an increase in business performance, 60% an increase in inward investment and 40% improvement in the reputation of local businesses as a result of any GDF development with recognition of the potential multiplier effects.

Figure 4.4: Perceived impact on employment

"Sounds big so there will be loads of jobs"

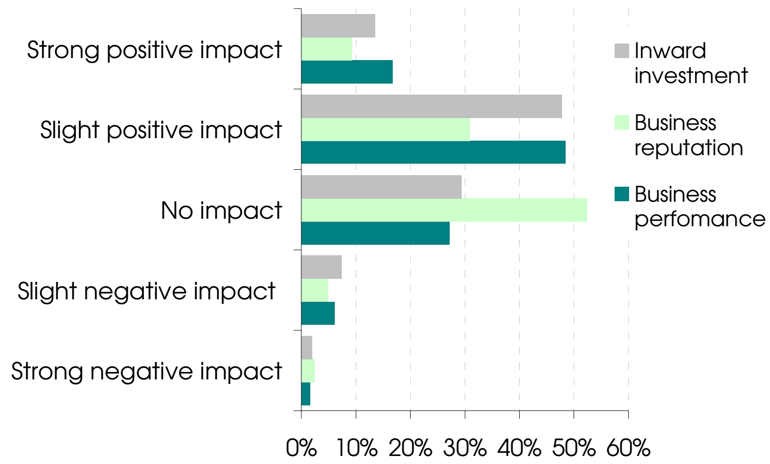


"I think it would deter other employers"

Don't know: 8 responses (Quality), 6 responses (Availability)

Figure 4.5: Perceived impact on the economy

"Has to be a good thing if more money to spend"



"Dump of the country – why is this good for business?"

Don't know: 9 responses (Inward investment), 8 responses (Business reputation and Business performance)

4. Residents perceptions

4.5 Housing

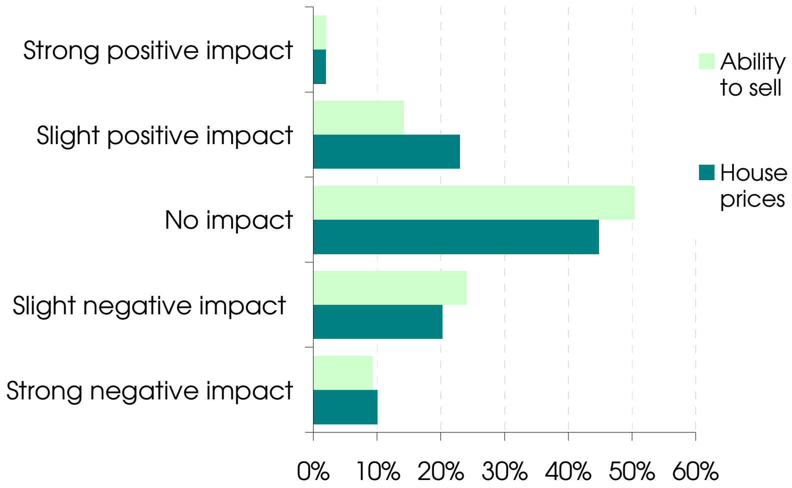
Just under half of residents thought that the development of a GDF would have no impact on house prices, although 1 in 10 believe there will be a strong negative impact. As many think that prices will go up as think they will drop. However, the ability to sell a property is a bigger concern, with 33% believing that homes will be more difficult to sell – but, significantly, this is dependent on where the facility is located geographically.

4.6 The environment

Whilst over half of the sample foresee no environmental impact, 40% have concerns related to noise, ecology and the landscape. The perceived impact on these three factors are all similar amongst residents. Those who felt that one of these indicators would be negatively impacted typically thought that there would be a negative impact across all three indicators.

Figure 4.6: Perceived impact on housing

"More demand in local market will boost house prices"

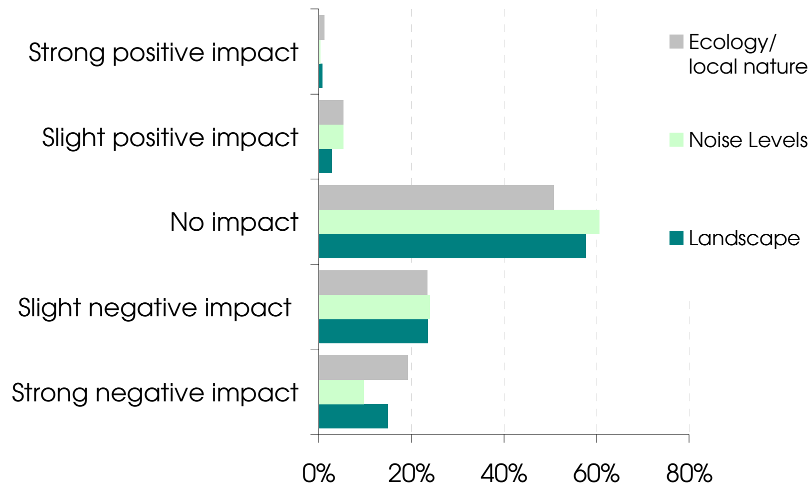


"Surely it would be harder to find a buyer if the dump is nearby?"

Don't know: 8 responses (Ability to sell), 5 responses (House prices)

Figure 4.7: Perceived impact on the environment

"No negative impact as long as environmentalists are managing it properly"



"Could be a disaster - especially if there's a leak"

Don't know: 8 responses (Landscape), 8 responses (Noise), 11 responses (Ecology)

4. Residents perceptions

4.7 Transport and access

Views on the impact on transport and access were mixed. Whilst 40% could see no impact, the rest of the sample was split between those believing that "there would have to be an investment" and roads and rail would improve, and others that could only see increased congestion. Around as many perceive a negative impact on roads as a positive impact (expecting the necessity to invest). The impact on public transport is mainly perceived to be neutral.

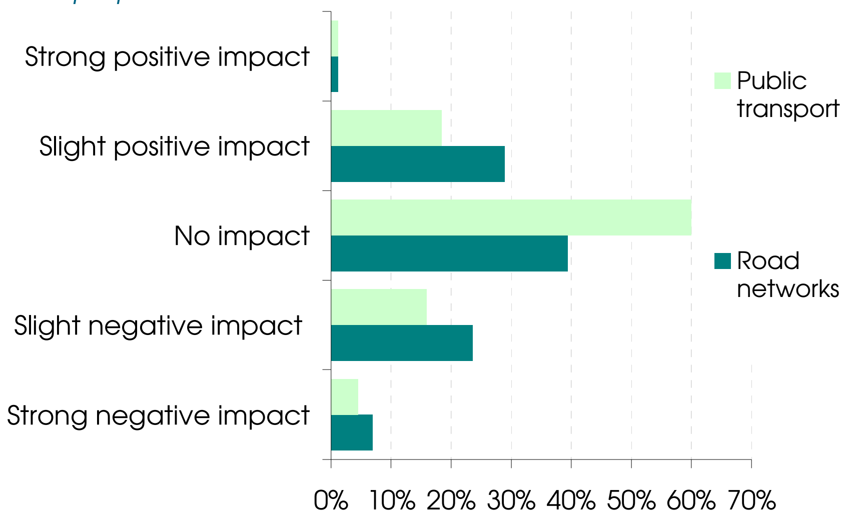
4.8 Migration and retention

The retention of the existing population and attraction of new people were seen as being generally positive outcomes of the GDF. 25% think it will lead to reduced out-migration and 50% to increased in-migration.

Over half of those sampled believed that it would help retain young people in the area and this is seen as a strong and positive impact of the GDF, linked to employment and skills opportunities.

Figure 4.8: Perceived impact on transport & access

"They would have to invest in the roads in preparation"

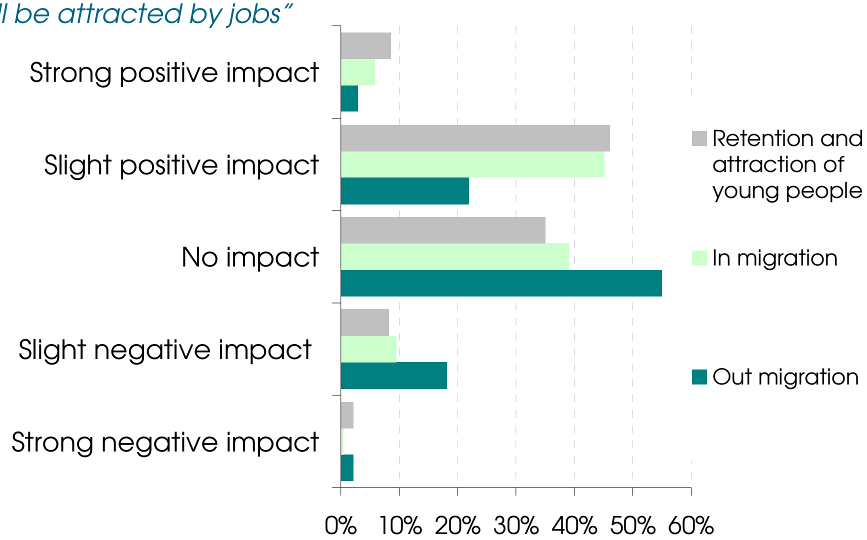


"Very inadequate and congested already"

Don't know: 9 responses (Public Transport), 8 responses (Road networks)

Figure 4.9: Perceived impact on migration & retention

"It is a reason to stay and people will be attracted by jobs"



"The fear factor means some people might leave"

Don't know: 12 responses (Young people), 15 responses (In migration), 14 responses (Out migration)

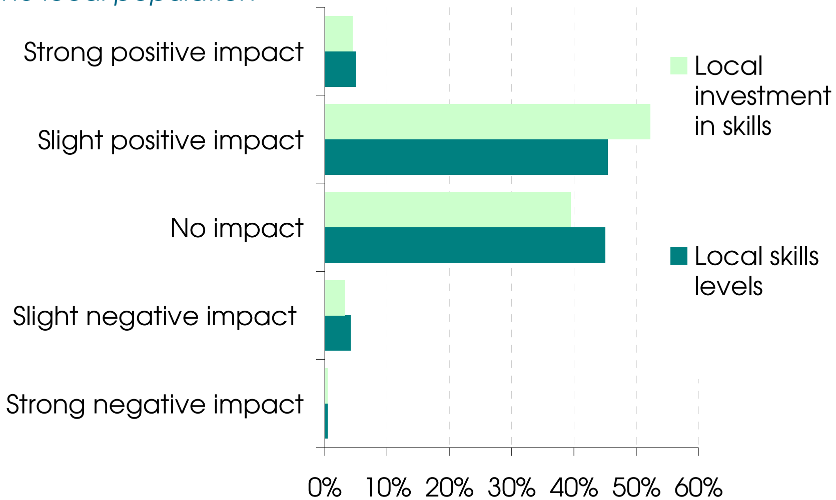
4. Residents perceptions

4.9 Skills

Figure 4.10 clearly illustrates that residents perceive that a GDF development will have a positive impact on both skills levels but also investment in developing skills. This is likely to be linked to perceptions of benefits for job creation and business performance. There is a strong perception that a GDF will require the upskilling of the local population and that this will generate greater socio-economic prosperity for residents.

Figure 4.10: Perceived impact on skills levels

"I am confident that they will invest in the local population"



"Skills will just be imported"

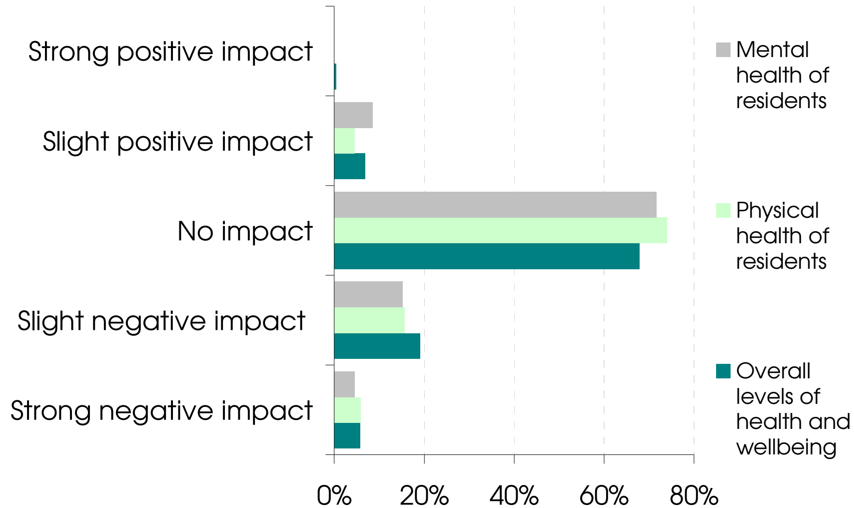
Don't know: 17 responses (impact), 12 (investment)

4.10 Health

Approximately 70% of the sample perceived no health impact of a GDF development. It is clear that residents perceive that the economic outcomes of the development outweigh any concerns over health problems whether mental or physical. However, 25% perceived a slight or strong negative impact, in a minority of cases related to perceived issues caused by Sellafield. Others thought that noise and dust during construction may cause mental or physical health problems.

Figure 4.11: Perceived impact on health

"If people get jobs their wellbeing might improve"



"Potentially disastrous"

Don't know: 11 responses (Mental Health), 14 responses (Physical Health), 8 responses (Overall)

4. Residents perceptions

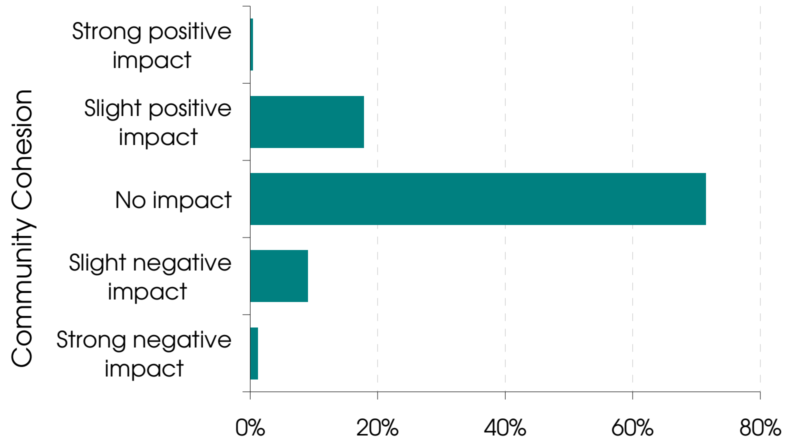
4.10 Community cohesion and crime

Figures 4.12 and 4.13 show that the vast majority of respondents perceived that the GDF will have no impact in terms of community cohesion and crime.

In terms of community cohesion, there is slightly more variation in terms of perception. Almost 20% expected an improvement in cohesion, linked to more jobs and less deprivation bringing communities together. However, around 10% thought that there would be a negative impact, for example due to tension between those supporting and opposing the development.

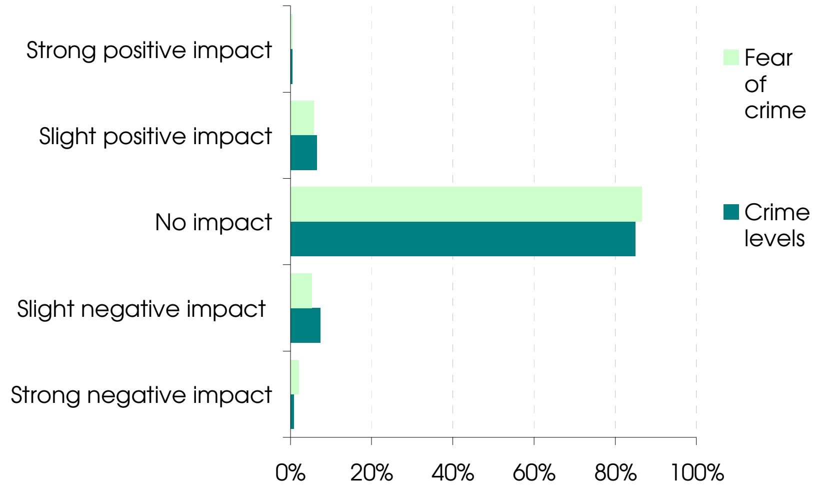
Resident perceptions of the impact on crime are largely ambivalent with very few expecting a positive or negative impact and the majority unable to see a link between the two issues. For those with a positive perception, this related to economic growth generated by the development leading to less crime. For those expressing a negative perception, this was related to issues including contractors and the potential threat of terrorism, for example.

Figure 4.12: Perceived impact on cohesion



Don't know: 14 responses

Figure 4.13: Perceived impact on crime



Don't know: 9 responses

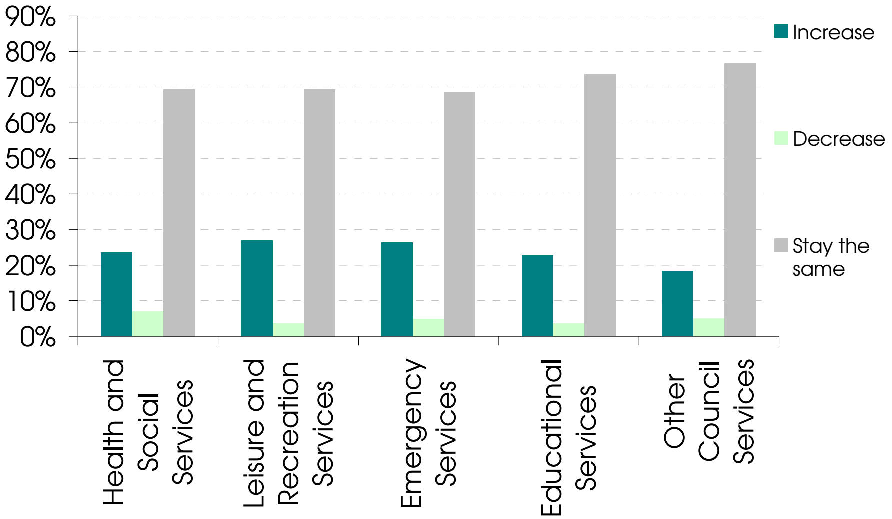
4. Residents perceptions

4.11 Availability of services

The vast majority of residents expect that the GDF will have no impact on public services, as illustrated in Figure 4.14. Across all types of services, around 70% of residents suggested that there would be no impact.

However, more residents thought that these services would improve than those who expected them to weaken. This is linked to the perceived necessity of investment as a result of the development and that local prosperity would mean better services.

Figure 4.14: Perceived impact on availability of services



Don't know: 12 responses

4.12 Feedback from the rural community

The key findings in terms of the perceptions of the rural community, based on focus groups held with residents, include the following:

- There is limited awareness of the MRWS Partnership and the decision-making process, amongst the rural community and a desire for more information.
- The main concerns relate to the perceived impact on landscape, property and land prices, the ability of infrastructure to cope and possible negative effect on the growing tourism sector in West Cumbria.
- It is perceived that no benefits will be created for local people - "contracts will go to big international companies who will bring in their own workforce."
- There is a belief that there will be net long-term job losses due to the impact of such a facility and that this will have an impact on young people's prospects.
- There is significant concern over the risk of a GDF, linked to previous alleged contamination from Sellafield, and a wider belief that West Cumbria has a negative reputation due to the nuclear industry.

4. Residents perceptions

4.13 Feedback from older people

The key findings in terms of the perceptions of older people, based on focus groups held with residents, include the following:

- A perception that local people still don't fully understand the scale of GDF or the process.
- The need to be clear about the number and type of job opportunities that will be created and how many will available to local people.
- West Cumbria still bears the scars of limited investment in housing, health and infrastructure and that these must be addressed if the development goes ahead
- A perception that local people will prioritise employment opportunities over safety concerns because shops and other businesses rely on the nuclear industry.
- Concerns exist due to limited understanding of long-term storage of plutonium - "if it's underground it's not as easy to monitor".
- The location is an important factor in terms of perceptions - "most people wouldn't have a problem if it was at Sellafield or Drigg."
- There is concern that the previous 'boom and bust' pattern will be repeated as seen in Egremont in the 1980's.

4.14 Feedback from young people

The key findings in terms of the perceptions of young people people, based on focus groups held with residents, include the following:

- Young people have a significant expectation of jobs and training provision to be created as a result of GDF development and that these will improve their future prospects.
- There is a perception that West Cumbria is already seen as a 'nuclear area' and therefore that people will not leave because of GDF.
- Due to existing perceptions of the area young people do not envisage that the area or house prices will be negatively impacted.
- There is some concern that the nuclear industry will be their only option in future despite relative ambivalence.
- There are very limited concerns about risk and safety as they are used to living with Sellafield and recognise that waste is stored there now:
  - "We're all still here aren't we…"
  - "I wouldn't necessarily be against it but I wouldn't work there…"

4. Residents perceptions

4.15 Feedback from property agents and RSLs

Consultation with this group has enabled us to understand how potential residents of Cumbria may perceive any GDF development.

It is clear that there is currently an 'East-West' polarisation of the housing market with very different characteristics exhibited in West Cumbria compared to the Central Lakes.

Key characteristics of the current housing market in West Cumbria include:

- A more diverse market than the Central Lakes in terms of property type, tenure, quality and cost – but a market that is also stagnant and has aligned with the national downward trend.
- A very limited external housing market with in-migration driven by employment factors and affordability rather than choice of location.
- An increasing trend for in-migrants to rent rather than owner occupy creating a shortage of rental properties exacerbated by an increase in demand by foreign workers.
- In some areas of Copeland, sales have reduced due to uncertainty around employment, for example a concern that existing contracts will not be renewed.

Key characteristics of the current housing market in the Central Lake District include:

- The area is perceived as very attractive locations for lifestyle in-migration, including for retirement and second homes.
- Property prices are extremely high and out-of-reach of local people, especially in places such as Keswick, which is perceived to have the highest house prices outside of London.
- The area is also attractive to high end Sellafield workers who commute each day from places such as Cockermouth and are attracted by the quality of life available to them compared to the West.
- There is a similar shortage of rental properties, particularly demand from executives seeking higher quality homes.

The impacts of any GDF development on the housing market and consequently for potential residents of the area are fundamentally perceived to be location-dependent. The perception is that the siting of the facility will have a localised impact on house prices and the ability to sell a property. However, it is also anticipated that there will be a range of additional supply and demand impacts for Cumbria, including:

4. Residents perceptions

- There will be a significant boost in rental demand in the construction phase, in the proximity of the development. Historically these have congregated around Workington and Whitehaven.
- While there will be a short/medium term increase in demand for mid-level rental accommodation there is a danger that this will stagnate following construction.
- Whether jobs go to local people or workers are brought in, the direct and induced economic impact will stimulate housing demand and may bring sites forward for development.
- Job creation may also enable increased owner occupation and a reduction in RSL waiting lists enabling improved housing quality for those on lower incomes.
- Housing developed to meet workforce demand during the construction phase may generate a legacy either for future residential use or supporting the development of the tourism sector in West Cumbria
- A repository may dampen lifestyle in-migration in the Central Lakes but executives will require accommodation to match their status. This may mitigate against any potential loss of market for these lifestyle property purchases.

4.16 Police and Health

A focus group held with representatives of Cumbria Police provided valuable findings in terms of understanding the perceived impact on emergency services.

The Police are committed to being involved in the planning process and are keen to work in partnership to ensure that there is a joined-up approach. This includes ensuring that GDF is not considered in isolation but that the wider impacts of Britain's Energy Coast proposals are addressed in a holistic way.

The key perceived impacts that will affect the Police include:

- GDF will increase population, which has implications for crime, community safety and health provision.
- Local communities are still suffering from the tensions and generational issues resulting from the 1980's 'boom years' and there must be adequate planning to prevent a repetition of the social problems that this caused.
- In the context of increased demand, there is concern due to ongoing budget cuts and resulting capacity issues and the need for funding formulas to incorporate this development.

4. Residents perceptions

- Many of the potential risks associated with a GDF (for example, environmental protests, terrorism, traffic incidents) can be mitigated if there is sufficient time to plan and that resources are made available.
- Infrastructure is a serious concern for the police and this particularly relates to the potential for increased volumes of traffic on unsuitable roads.
- Siting and classification of the GDF is important as both will impact on which constabulary has responsibility for its policing and if this will be the responsibility of Cumbria Police or the Civil Nuclear Constabulary.

Key findings from the PCT include:

- There are no direct health concerns and a perception that the community would actually get healthier if employment levels rose and people were happier.
- Increased demand due to the population rise would be manageable if there was time to plan.

4. Residents perceptions

4.17 Summary of residents views

In summary, there is no general consistent view amongst residents in relation to the GDF. Each individual comes from a different background and has different priorities and knowledge of the subject matter.

The general population is divided, but agree on one main factor: employment. 77% of all respondents felt that the greatest advantage of the GDF was its ability to create employment in the local economy. When asked for a single largest disadvantage, some stated the impact on the environment (18%), some the effect on tourism (16%) and some the health implications (14%).

When looking at specific groups, perception is more polarised. Young people were generally positive, seeing the benefits of high quality sustainable jobs as key. Older people were more cautious, remembering the disruption of the construction period decades ago, stating the environmental and health risks, but being pragmatic and acknowledging the substantial economic opportunity. The rural population were understandably negative, seeing a direct impact on the landscape and on rural activities and tourism.

Consistent views across all groups include:

- The perceived impacts of any GDF development are location dependent for individual residents and their proximity to the site.
- The presence of Sellafield is a key factor in reducing negative perceptions of the GDF with residents closer to Sellafield being most positive.
- Provision of adequate road, rail and housing infrastructure for the GDF will address any potential negative impacts.
- It must be ensured that jobs and supplier contracts are channelled to local people and businesses, by investment in skills and supporting the local supply chain;
- Continue to engage with the community in a partnership approach including through the provision of sufficient information to enable people to make informed decisions;
- The need to allow sufficient time and resources to plan public services carefully and ensure that demand is met.
- The management of the construction phase will be critical in terms of the workforce and factors such as housing to ensure that the legacy is managed and there is no 'boom and bust.'

5. Visitors perceptions

This section presents the findings of engagement activities with visitors.

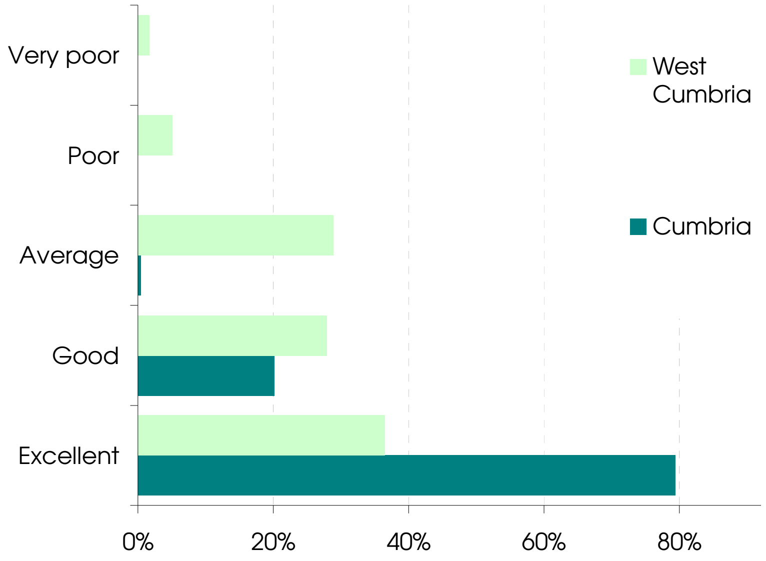
5.1 Introduction

The existing view of Cumbria as a place to visit is strong, as shown in Figure 5.1, with a world class destination in the Lake District, and high return rates for visitors. There exists, however, strong differentiation between the Lakes and the Coastal area. When speaking to visitors, the impact of a GDF on these perceptions were tested.

5.2 Quality of destination

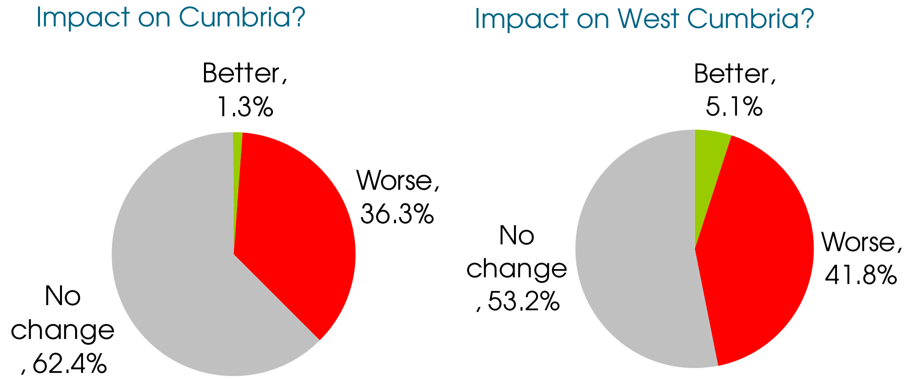
As shown in Figure 5.2, over 60%of the visitors interviewed expected that the GDF would not change the quality of Cumbria as a visitor destination. This figure dropped to just over half when they were asked specifically about West Cumbria. Over 4 in 10 visitors thought that the GDF would make West Cumbria a worse place to visit.

Figure 5.1: Current perception on quality of destination



Don't know: 5 responses

Figure 5.2: Impact of a GDF



Don't know: 6 responses

Don't know: 6 responses

5. Visitors perceptions

5.3 Transport and access

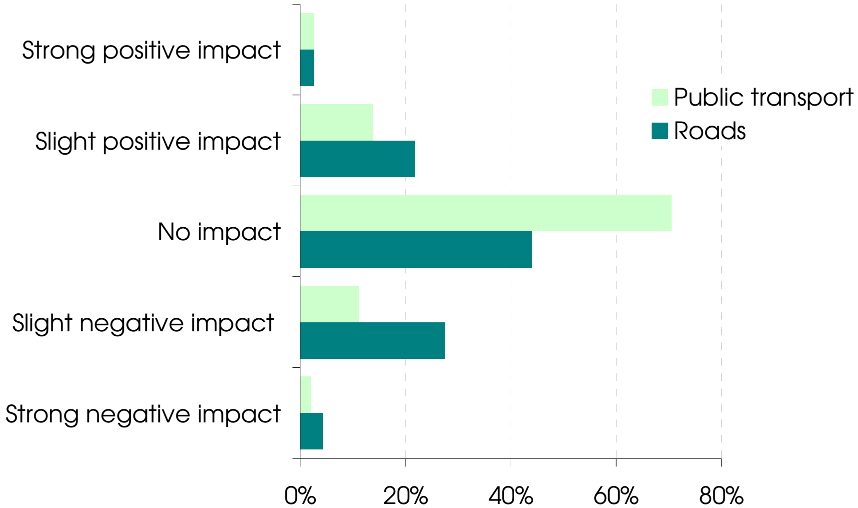
The perceived impact on transport and access is split almost equally (Figure 5.3). Around as many think the GDF will create negative impact on roads, primarily through as a positive impact. Interestingly the main rationale for the positive viewpoint was the notion that transport improvements would be a necessity and that development would not proceed without them. The perceived impact on public transport is mainly neutral.

5.4 Environment

The environment was generally an area for concern amongst visitors (Figure 5.4). Almost 60% of visitors surveyed felt that the GDF would have a slight or strong negative impact on ecology and landscape. 40% thought noise would be an issue. Much of the negative viewpoints were driven by a perception that the development would be intrusive, but many visitors also made the point that the specific location of the GDF would be crucial in driving opinion.

Figure 5.3: Perceived impact on transport & access

"It could help improve transport as the Council would have to invest"

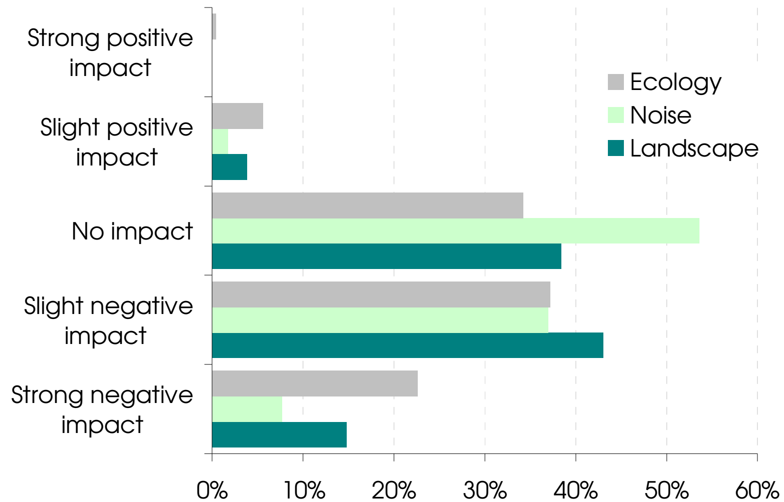


" There is bound to be more traffic coming and going to the site - the roads are already congested in Cumbria"

Don't know: 12 responses (Public), 12 responses (Roads)

Figure 5.4: Perceived impact on the environment

"I assume the site would be constructed sympathetically"



"Unnatural intrusion into a landscape and habitat noted for natural beauty and wildlife"

Don't know: 12 responses (Ecology), 11 responses (Noise), 8 responses (Landscape)

5. Visitors perceptions

5.5 Tourism

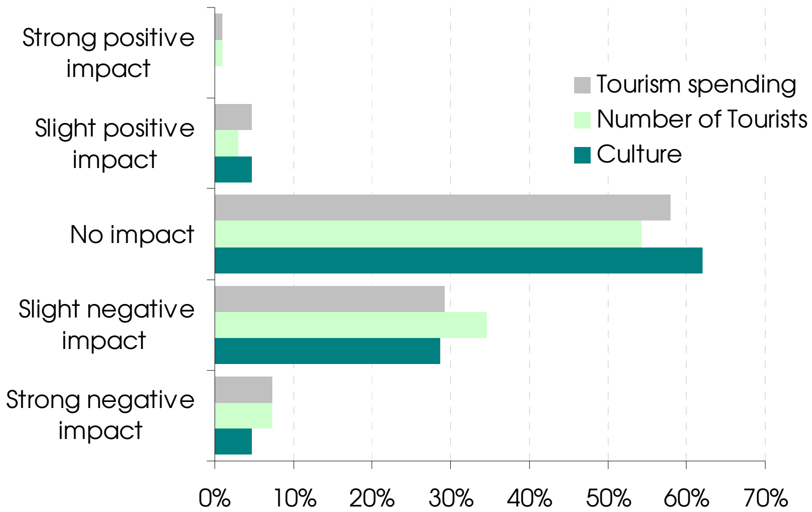
Whilst well over half of all visitors could see no possible impact on tourism, 4 in 10 felt that the GDF would negatively impact on the number of tourists and 36% believed that spend would decrease. General views concentrated on the 'negative publicity' associated with the nuclear industry and fear that potential first-time visitors would choose another destination. A third of those surveyed felt that the cultural heritage of Cumbria would suffer.

5.6 Availability of key services

As shown in Figure 5.6 below, around ¾ of the sample perceived no impact on any key tourism service. Over 15% suggested that the GDF would bring with it the demand for increased accommodation, retail and restaurants, and that this would have the potential to improve the quality and availability of these services.

Figure 5.5: Perceived impact on tourism

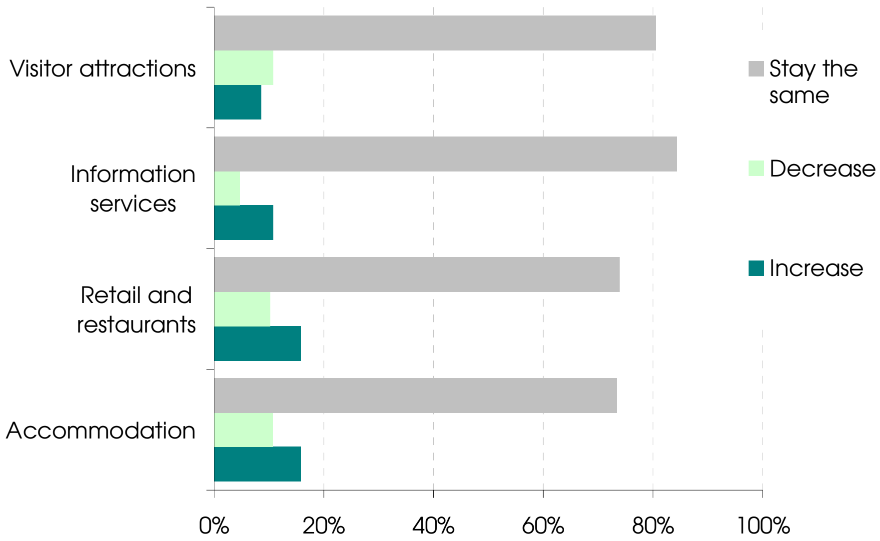
"Potential for overseas fact finder visits"



"I think if tourists are ill-informed they may not wish to visit a 'nuclear site'."

Don't know: 12 responses (Tourism Spend), 14 responses (Number of Tourists), 12 responses (Culture)

Figure 5.6: Perceived impact on service availability



"More money in the local economy would mean that there'd be more demand for better hotels"

Don't know: 12 responses

5. Visitors perceptions

5.7 Feedback from tourist focus groups

Current perceptions

The current perception of Cumbria amongst tourism stakeholders, businesses and representatives groups is generally very strong, dominated by the Lake District which is consistently regarded as a "world class visitor destination" and "valuable brand" while national and international appeal.

There is, however, a clear differentiation between Cumbria (The Lake District) and West Cumbria (an emerging visitor market). Focus group participants generally regarded them as two different markets and expected tourists to hold the same view. West Cumbria is perceived to have a different tourist profile with far fewer visitors looking for a quieter environment, and encountering a smaller range of poorer quality accommodation, mainly self-catered.

A consistent perceived factor across both markets is the reliance on a high return rate – and the current presence of nuclear industry will have limited impact on the coastal areas in this regard. A widely held perception is that tourists are aware of Sellafield but may not fully understand its function or their proximity to it when visiting the Central Lakes.

Tourism groups and stakeholders

In general the perception of tourism representative groups and stakeholders in regard to the GDF was cautious, and in the main, negative. Whilst there was broad acknowledgement of the need to take responsibility for our waste storage in the UK, there was also concern that the GDF could impact on the county's tourism offer. This was particularly the case for West Cumbria's "fledgling" visitor economy where reference was made to the ongoing efforts to feed off the success of the more mature tourist hubs in the Lake District.

This overall view accepted, it was also clear that the full extent of opposition to the GDF and perceived impact on the visitor economy would depend on the specific location of the facility, and its relative location to tourist hubs. There would be significant opposition to a facility within the national park.

Across tourism professionals, there is a common view that the media would have a substantial impact on perception and hence on the visitor economy, and that the management of messages is crucial. Within this the protection of the Lake District brand is essential, as this drives much of the new visitors to Cumbria in general.

5. Visitors perceptions

A number of individuals suggests that, to counteract negative publicity, the nuclear industry could 'give something back' to wider society in West Cumbria. This could include investment in education or community facilities. There was a strong feeling that benefits of the GDF should not just be felt in the immediate vicinity of the development.

Accommodation and Tourism Service Providers

Amongst those businesses working directly with tourists, including hoteliers, publicans and those managing visitor attractions, there is, in general, a strong opposition to a GDF. The main argument is that the impact on the tourist industry in Cumbria would out-weigh any benefits felt in energy related sectors.

The concern is that 'nuclear anything' stimulates a negative reaction amongst visitors and in the current fragile economy, visitors would simply choose to go elsewhere. An alternative approach to economic growth on the Coast was consistently tabled: link the tourism offer in the Lake District to coastal areas better, diversifying the economy. It is regarded that GDF could jeopardise this.

Amongst tourism businesses, there is also significant concern over the level of information residents, visitors and businesses are receiving with which to make a decision. They would like to see a full debate on the technology being used and the alternatives available.

Also common is this group was to highlight environmental concerns including the perception that tourists would have around safety and health risks. This view suggested that "nuclear" creates a ripple effect in regard to safety. Extending the nuclear 'footprint' into non-coastal areas will result in negative impacts on tourism and job losses, many claim. It would also affect current efforts to develop the tourist offer in West Cumbria and encourage new visitors to the Central Lakes.

The final major common perception amongst this group was the fear that the construction period would bring with it significant disruption, noise and landscape impacts. There is also lack of faith in the authorities to deliver a secure facility and deliver the significant transport, housing and other infrastructure requirements required.

5. Visitors perceptions

5.8 Summary of visitor views

There is general concern amongst visitors, businesses operating in the tourism industry and wider stakeholder organisations in relation to the GDF. When asked about the single main advantage of the GDF, 48% of tourists referred to employment creation and the benefits to the economy. Stated 'largest' concerns included the impact on the environment (24%), health risks (23%) and the impact on the tourism industry (19%). These are the key reasons why around 4 in 10 people think the area will be a worse place to visit post the creation of a GDF.

Whilst the overall view of visitors and those that work with and represent them is more negative to those of residents, the strength of this perception is clearly driven by:

- the choice of a location for the GDF and the relationship between this and core visitor areas;
- the influence of the media and the way that communication in relation to the GDF is managed the local tourism 'brand' protected; and
- the strength of partnership working and engagement with key stakeholders and representative groups.

6. Business and investor perceptions

This section presents the findings of engagement activities with current and potential businesses.

6.1 Introduction

Current perceptions of West Cumbria amongst existing businesses and potential investors were explored in detail during the research and formed the basis for exploring how these would be affected by GDF development.

This is a important aspect of the research. Residents perceive that the benefits to businesses will be significant due to GDF development and that it will be a key driver of job creation and economic growth. Views such as this were tested with businesses to establish the impacts they believe a GDF will generate and how these can be planned for.

6.2 Current perceptions

The perception of West Cumbria as a place to invest or locate a business is considerably variable between different sectors, geographies, and types of organisation. For example, there are significant differences between businesses operating in the rural economy or tourism compared to those operating in manufacturing or high-tech industries. These current perceptions also translate into similarly polarised views on the potential impact of any GDF development.

The key perceptions of the economy in West Cumbria amongst the business community include the following:

- The area was previously attractive to investors due to the availability of subsidies, cheap labour and premises – as some of these have diminished, investment has significantly reduced.
- The nuclear industry is the main attraction for inward investors; it dominates the economy and provides significant direct and induced employment to West Cumbria.
- There is local recognition of the value of the nuclear industry to the economy in terms of job security, generating spending power and ensuring business viability.
- There is very limited inward investment or diversification into sectors other than those that are nuclear related and this creates a dependence on the sector and an outward perception that it is a 'nuclear area.'
- The lack of diversification into other sectors is mainly driven by the inaccessibility of the area in terms of transport infrastructure rather than any negative perception of the nuclear industry – although this negative perception is more significant for specific sectors, for example the food and drink industry.

6. Business and investor perceptions

- Businesses and investment are also constrained by issues associated with slow broadband speeds in specific areas and a lack of other infrastructure to support their operations.
- While investment is attracted by knowledge and skills in areas such as Advanced Manufacturing and Systems Integration, skills gaps can also constrain investment.
- Generational worklessness and a lack of investment in skills and training provision is a key driver for skills gaps outside of the nuclear sector.
- There are economic interdependencies with other geographies – for example the 'spill-over' effect of tourism in the Lake District and the significant levels of interdependency with the Furness economy.
- Quality of life is a significant attraction for many people considering investment in West Cumbria. While this is not as significant as within the Lake District, the cost of property there means that some investors will locate in West Cumbria, on the fringes of the Lake District with accessibility.
- There is an increasing propensity for micro 'lifestyle' businesses in West Cumbria – investment is largely from very small or very large businesses with a lack of medium-sized businesses investing in the area.

A polarisation of perception has also been identified in relation to sector dependence. While nuclear-related businesses and those gaining indirect benefit from the sector are generally positive, there is also a perception that West Cumbria is over-reliant on the nuclear industry.

The gradual reduction in employment at Sellafield is acknowledged by the business community. Given the contribution that this makes to the local economy, there is a realisation that these jobs must be replaced to avoid significant levels of stagnation with the consequent effect on SMEs in the area.

It is also accepted that the recession has had a significant impact, with an uncertain outlook and a climate in which small businesses are struggling. Therefore, while the nuclear sector is perceived as a positive thing, the need for West Cumbria to diversify is also widely accepted.

Currently, through the BEC project, there is increasing diversification into areas such as renewable energy. This is particularly the case for 'wind farms' due to West Cumbria's proximity to the Irish Sea and the further expansion of port capacity and capability.

6. Business and investor perceptions

The impact of a GDF on perceptions of the West Cumbria economy and how it will affect its ability to diversify was therefore an important consideration for this research.

6.3 Perceived impacts

The perceived impacts of a GDF, both for existing businesses and for potential investors into the area, are seen as largely positive. However, there are exceptions to this, amongst specific sectors such as tourism, but also amongst those who would like to see increased diversification of the economy and feel that this will further stifle this.

For **existing businesses**, there is no overall consensus on the extent to which a GDF will create direct additional jobs for local people. There is a lack of understanding of the number and quality of employment and the extent to which local labour will be utilised.

To some extent, this limits the depth of perceptions in relation to the economy. For example, in addition to the use of local labour, there are further concerns about a short-term 'boom' during the construction phase. It is perceived that this could be followed by economic stagnation when the construction workforce leaves the area and the site is in its operational phase with a small and specialist workforce.

Providing that the jobs are created in the numbers perceived to be required for a project of this scale, businesses agree that this offers a huge opportunity for the local area, in terms of growing enterprises, retaining people and retaining wealth in West Cumbria with a multiplier effect for SMEs. It is also suggested that the necessary infrastructure investment would have significant wider benefits.

For the GDF to have the greatest impact interviewees suggest that there is the need to develop the capacity of existing businesses to be able to engage in the supply chain. There is perceived to be significant existing expertise in delivering for the nuclear industry and that this opportunity needs to be maximised.

This capacity of existing companies to deliver for the site and capture sub-contracting opportunities is also driven by skills. In general, businesses feel that there need to be investment in skills in the form of tailored courses or apprentices programmes to ensure that the area is well equipped to supply the labour to the GDF.

Businesses also consider that this development also offers the potential to retain existing skills and expertise as Sellafield reduces its activities. It may also encourage young people to remain in the area and promote safe and secure careers in the nuclear industry.

6. Business and investor perceptions

For **potential investors,** there are mixed views regarding the impact of a GDF development on inward investment. Again, these perceptions are polarised according to geography and sector, which have key impacts on how this development is viewed.

The GDF is seen as part of a series of major schemes which have the potential to drive significant and sustainable investment into West Cumbria over the next thirty years. However, it is suggested that there is considerable potential to tie the GDF closer to other proposals.

The proposals currently being worked up including the possible Nuclear New Build and the University of Manchester Dalton Research Institute. This would create a coherent and attractive impression of a 'cradle to grave' nuclear sector attracting international reputation and expertise, rather than the development of a 'dump' in isolation.

However, there is also a perception that if the GDF development goes ahead, this will stifle diversification into other areas, for example tourism and renewables. Significant work is being undertaken to generate investment in both of these areas to date and there is concern that this will be reversed should the development progress.

Linked to this, it is also perceived by some stakeholders that the GDF has the potential to stifle Government support for investment and diversification. This view is based on the perception that the economic benefit and investment in a GDF skews the actual situation in terms of prosperity and will reduce government support for West Cumbria.

It is also acknowledged that the GDF will attract a lot of negative publicity within the media, which will need to be managed. There is a concern that investors in other sectors would not be attracted to the 'nuclear coast' so there must be a parallel focus on the BEC project and supporting further economic diversification.

Supporting infrastructure may be key to addressing these perceptions. The existing transport network is considered not fit for purpose and the GDF offers further opportunities for development related industries around the ports, roads, rail and broadband provision.

The potential stress on the existing transport network during the construction phase will have a negative impact on potential investors. Therefore, if this is addressed with other infrastructure provision, the overall impact of the GDF may be very positive for investment in the area.

6. Business and investor perceptions

6.4 Summary of business and investor views

There is a current perception that while West Cumbria is significantly reliant on the nuclear industry, it generates significant value for the local economy. Therefore, a GDF development is seen as positive for most sectors, with the exception of tourism and rural businesses.

The GDF is considered to have the potential to boost the economy, strengthen supply chains and attract investment. The factors within this that have been identified as being particularly important are:

- The need for an honest dialogue with industry and the public with a clear presentation of the facts as they are established. Maintaining a dialogue with local businesses to support them to capitalise on the opportunities that emerging through the supply chain is crucial;
- Addressing concerns and providing more information about the potential scale of economic impact in terms of the number of jobs, the extent to which they will be sector specific and the longevity of this impact beyond the construction phase;
- Ensuring that benefits to the local economy are maximised by creating an appropriately skilled workforce – and there must be clarity on the size of opportunities and the extent to which they are available to local businesses;
- Delivering suitable and targeted business support throughout the process to enable access to opportunities and drive inward investment, but also mitigate against any negative impacts generated by media coverage; and
- Providing suitable supporting infrastructure to minimise disruption and support the development of complementary sectors, ensuring that the reliance on the nuclear industry is not compounded.

7. Conclusions

This research has identified a wide range of positive, negative and neutral perceptions relating the GDF, driven by personal experience and circumstance and the level of knowledge and interest in the issues that a facility of this nature can influence.

7.1 Place

From a 'place' perspective, the specific location of the site will be a key determining factor as to how people perceive the facility. For example, views on it with clearly differ if it is located in coastal areas, where nuclear related industries are broadly accepted and embraced, as opposed to inland, where they could be seen as a threat to tourism, farming and related industries.

Agents and RSL see a large potential impact on the property market implicitly linked with location and how the employment benefit will impact on supply and demand forces.

Amongst many, environmental issues are a concern, whilst others see the infrastructure and investment associated with the development as being a significant benefit. Much depends on how people perceive 'authorities' will deal with the GDF. For example some see it as positive from a transport perspective, as it will necessitate investment, whilst others can only see congestion, implying a lack of faith in those charged with delivering a sustainable solution.

7.2 Prosperity

When considering 'prosperity' it is clear that there is significant opinion that the GDF has the potential to generate large volumes of high quality, sustainable employment in a part of the country where new jobs are needed. Furthermore it is seen as benefiting existing businesses, by providing supply chain opportunities and injecting cash into the local economy.

There is caution, too, in regard to the economic contribution. Concerns exist in relation to the trade off between a prosperous nuclear-driven economy and efforts to further develop the tourism offer in West Cumbria and the rest of the County, and some are nervous that the area is becoming ever more reliant on one sector. Important questions have been raised regarding the number of jobs that will be created and if and how local labour and businesses will be utilised. Some say that the nuclear industry holds other sectors back, whilst others suggest that these are constrained more by accessibility than the negative image of Sellafield.

There is concern, among many, however, that benefits will accrue during the construction phase but that there will be a subsequent stagnation when the site is operational, as was seen in the 1980s.

7. Conclusions

A consistent perception across all parties is that workforce development and business support will be essential in maximising the potential benefits of a repository development. Infrastructure improvements are perceived to be a key outcome of the development and that this will drive business growth.

7.3 People

There is consensus is in the need to ensure that the employment created is retained locally, with suitable investment in skills, and that local businesses are well equipped to exploit the opportunities that arise.

In terms of the 'people' dimension, there is a broad view that the GDF could have the positive effect of helping to retain young people and attract new migrants. Some health concerns exist, however, in general amongst visitors rather than residents. There appears to be limited perceived impact on the level of crime, on community cohesion or the availability of key services.

There are limited perceived impacts, some positive linked to increased economic stability and some negative linked to the in-migration around the construction phase, on community cohesion and crime. There is general ambivalence regarding impact on public services – but some expectation of improvements linked to investment.

7.4 Additional Findings

There is no consensus of opinion across the three main groups consulted in this research – perceptions are very much based on the individual. The vast majority of research has been delivered prior to the events in Japan – with the very small volume of stakeholder engagement since highlighting how sensitive and vocal opinions in this subject area can be.

Clearly partnership working is going to be critical to the further development of proposals in relation to a GDF in West Cumbria, to ensure that the views of residents, visitors and businesses are accommodated. As well as building consensus, this will help to ensure that the benefits of a facility, if ultimately located in West Cumbria, are retained in the area, and that negative impacts are minimised.

Appendix A: Benchmark projects

See attached document.