

**OPR Case Study Paper CSP07**

# **Quarries and the Local Authority Development Plan**



**Oifig an  
Rialaitheora Pleanála**  
Office of the  
Planning Regulator

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\*herein referred to as the '2000 Act'.

# Acronym List

- > **AA:** Appropriate Assessment
- > **APM:** Aggregate Potential Mapping
- > **BREEAM:** Building Research Establishment Environmental Assessment Method
- > **C&D:** Construction and Demolition
- > **CPR:** Construction Products Regulation
- > **CRM:** Critical Raw Materials
- > **CRMA:** Critical Raw Materials Act
- > **CSP:** Case Study Paper
- > **DECC:** Department of the Environment, Climate and Communications
- > **DHLGH:** Department of Housing, Local Government and Heritage
- > **ECJ:** European Court of Justice
- > **EIA:** Environmental Impact Assessment
- > **EIAR:** Environmental Impact Assessment Report
- > **EIS:** Environmental Impact Statement
- > **EDEN:** Environmental Data Exchange Network
- > **EMRA:** Eastern and Midland Regional Assembly
- > **EoW:** End-of-Waste
- > **EPD:** Environmental Product Declaration
- > **EPA:** Environmental Protection Agency
- > **EU:** European Union
- > **GIS:** Geographic Information Systems
- > **GSI:** Geological Survey Ireland
- > **GHG:** Greenhouse Gas
- > **GPS:** Global Positioning System
- > **HSA:** Health and Safety Authority
- > **ICF:** Irish Concrete Federation
- > **IE:** Industrial Emissions
- > **IPC:** Integrated Pollution Control
- > **LEED:** Leadership in Energy and Environmental Design
- > **NDP:** National Development Plan
- > **NHAs:** Natural Heritage Areas
- > **NPF:** National Planning Framework
- > **NPO:** National Policy Objective
- > **NPWS:** National Parks and Wildlife Service
- > **NSAI:** National Standards Authority of Ireland
- > **NWRA:** Northern and Western Regional Assembly
- > **PSRNI:** Planning Strategy for Rural Northern Ireland
- > **PSV:** Polished Stone Value
- > **RDS:** Regional Development Strategy
- > **RPOs:** Regional Policy Objectives
- > **RSES:** Regional Spatial and Economic Strategy
- > **SACs:** Special Areas of Conservation
- > **SEA:** Strategic Environmental Assessment
- > **SPAs:** Special Protection Areas
- > **SPPS:** Strategic Planning Policy Statement
- > **SRA:** Southern Regional Assembly
- > **SRM:** Strategic Raw Materials
- > **WAPCE:** Waste Action Plan for a Circular Economy



# 1.0 Introduction: The Context for Sand and Gravel Extraction and Quarrying in Ireland

Extractive industries and aggregate production has supported economic development, the provision of housing and new infrastructure through a number of economic cycles in Ireland. Quarries and the extractive industry provide valuable sources of raw materials which are critical to the construction industry, infrastructure development and maintenance in particular.

Aggregates, such as stone, sand and gravel and concrete products contribute significantly to economic development. Notwithstanding this, the potential use of alternative sources of sustainable material such as construction and demolition (C&D) waste for civil and construction related projects is supported by government policy. The policy recommends that C&D waste should be used, where possible, in the interests of promoting the circular economy.

The planning system plays a key role in the management of natural resources and the protection of natural and cultural heritage.

It is over twenty years since the publication of statutory planning guidelines on quarries<sup>1</sup> which recognised this role. As the planning system embarks on further reform,<sup>2</sup> this case study paper provides an overview of how planning authorities have addressed the guidelines and the extractive industry sector in general. The case study paper draws from the OPR's experience and learnings, since its establishment in 2019, including its review of:

- > all city and county development plans across the state;<sup>3</sup>
- > eight local authorities; and
- > An Bord Pleanála.

<sup>1</sup> **Section 28 Quarries and Ancillary Activities – Guidelines for Planning Authorities** (2004).

<sup>2</sup> Enactment of the new Planning and Development Act 2024 (the 2024 Act) and the First Revision to the National Planning Framework (NPF).

<sup>3</sup> Note: this research is based on the OPR's review of 29 development plans and excludes a review of the development plans for Sligo and Monaghan which were still 'live' when that phase of the research was carried out.



The case study paper examines how the planning system has evolved, and sets out broad conclusions for future policy.

In keeping with the goals and objectives of the OPR's Planning Research Framework it is intended that this case study paper will assist in addressing knowledge gaps, provide support for practitioners and planning authorities and highlight best practice to foster shared learning.

For clarity, this research did not entail an examination of development management processes in planning authorities (or An Bord Pleanála) in respect of planning applications for quarry development. Furthermore, planning enforcement of quarry developments was examined from a strategic level and specific cases were not analysed as part of this research.

## 1.1 Supply and Demand – The Bigger Picture

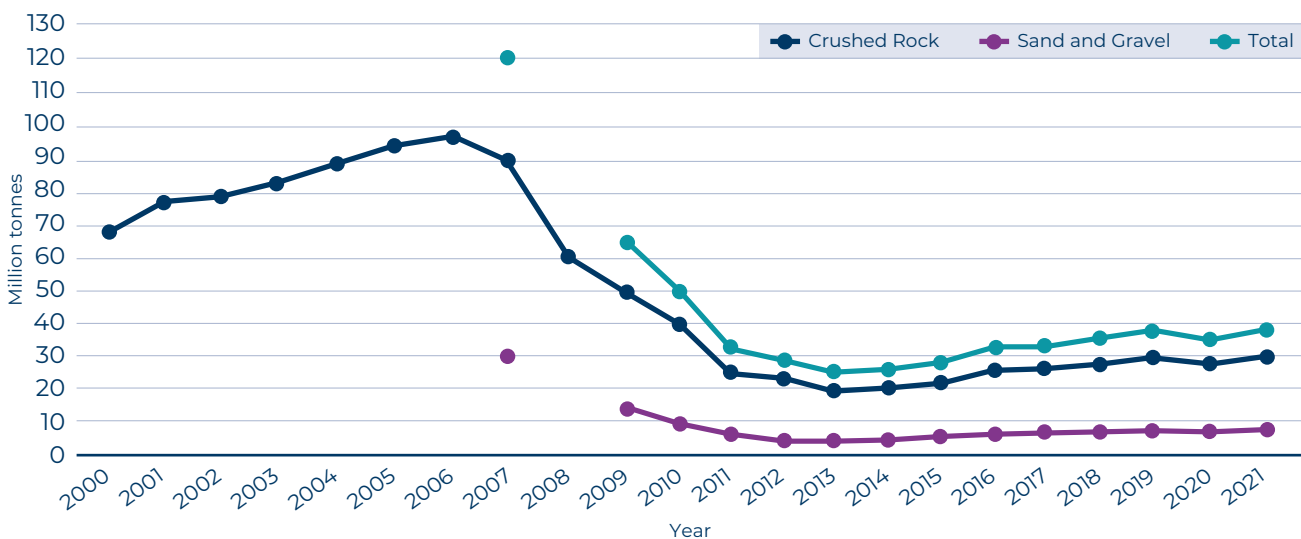
A SWECO report,<sup>4</sup> prepared on behalf of the Environmental Protection Agency (EPA), in 2023 provided an analysis of aggregate use in Ireland.

The research was undertaken in support of developing national End-of-Waste (EoW) criteria. The objectives of the research were to understand:

- > current and future demand for quarried aggregates;
- > provision, within harmonised standards and specifications, for the use of recycled aggregates; and
- > the appetite or demand within the sector to use recycled aggregates alongside quarried aggregates.

The report found that the demand for aggregates in Ireland (12 tonnes per capita) is double the average demand in other European Union (EU) countries. The report quoted the Irish Concrete Federation's (ICF) estimate of Ireland's aggregate production rate in 2021 as approximately 38 million tonnes and the aggregate production rate over the period 2000 to 2021 was illustrated in the report and is shown in Figure 1 below.

**Figure 1 - Irish Aggregate Production Estimates 2000-2021 (excluding concrete production).**



Source: SWECO, 2023

<sup>4</sup> **Analysis of Aggregates Market in Ireland** (2023), an EPA commissioned report.



The report found that circa 40% of national civil and construction related activity occurs in the Dublin region, and accordingly this is where the highest demand for aggregates exists. While extensive national aggregate reserves exist throughout Ireland, reserves of specific aggregates such as high-quality sand and high Polished Stone Value (PSV)<sup>5</sup> aggregates are nationally limited.

The report found that the use of recycled aggregates in products used in civil and construction projects is becoming of significant interest to customers, from a sustainability and embodied carbon perspective. This interest is driven by sustainability appraisal processes such as Leadership in Energy and Environmental Design (LEED) and the Building Research Establishment Environmental Assessment Method (BREEAM) as well as the ability to produce an Environmental Product Declaration (EPD).

Recycled aggregates are derived from the reprocessing of materials originally used in construction and are predominately derived from C&D waste. They include sand, gravel, crushed stone, asphalt and concrete which are crushed to a specific aggregation specification. A clear demand for recycled aggregates was identified in the report, driven by a desire not only to manage existing reserves but by procurement processes in the private and public sector seeking '*green materials*'.

The report highlighted the importance of good source segregation of C&D material on the site of origin and found that this was a very important factor in the preparation of consistent, quality controlled material.

In conclusion, the report found that both the waste operators and virgin aggregate producers expressed a strong desire to see the establishment of relevant EoW criteria in relation to recycled aggregates in order to satisfy the emerging demand that exists, in terms of having a clear regulatory framework to oversee the management and subsequent use of recycled aggregates.

### Essential Aggregates – Providing for Ireland's Needs to 2040, Irish Concrete Federation

In addition to the EPA-commissioned SWECO report, the Irish Concrete Federation (ICF) published a report entitled **Essential Aggregates - Providing for Ireland's Needs to 2040** (2019) following the Government's launch of Project Ireland 2040 (comprising the National Planning Framework (NPF) and National Development Plan 2021-2030) in 2018.

The ICF report acknowledged that the achievement of the objectives of Project Ireland 2040 will require access to significant reserves of aggregates (stone, sand and gravel) over the lifetime of the Government's strategy. The report suggested that while the importance of aggregates was acknowledged in the NPF, planning policy at national, regional and local level will need to prioritise the role that aggregate extraction plays in underpinning economic and social life.

The report highlighted the fact that every new home typically requires up to 400 tonnes of aggregates and that construction of one kilometre of roadway requires up to 30,000 tonnes of aggregates. The report suggested that demand for aggregate based construction materials will continue to increase and that approximately 1.5 billion tonnes of aggregates will be required to meet Ireland's needs to 2040.

<sup>5</sup> A PSV test is the evaluation method for determining the skid resistance of road surfaces.



The report acknowledged that quarries will contribute to the circular economy as recycled aggregates from C&D waste, while unlikely to exceed 5% of demand, will be an integral part of the future construction supply chain.

The report noted that the planning process will play a key role in realising the potential of the extractive industries sector and enabling a long term, sustainable supply of raw materials.

The report acknowledged that existing reserves at active quarries and pits are inevitably impacted upon by ongoing extraction activity and are not being replenished at an equivalent rate. The report suggested that Ireland needs an authorised reserve of approximately 1.5 billion tonnes of aggregates to meet expected demand for Project Ireland 2040.

In order for the planning process to identify and protect important reserves of aggregates, the report suggested that there needs to be stronger national resource identification and protection measures in planning processes. The report concluded that this ultimately will enable aggregate production facilities to be developed, in appropriate locations, taking account of the specific nature of the extractive industry sector and the geographical incidence of demand.

The report noted that aggregate planning policy in Ireland is principally delivered through the County Development Plan system, which can lead to variances in approach across local authorities. The report suggested that aggregate planning policy should be planned, monitored and managed in a more effective manner at a strategic level to ensure a sustainable supply of materials to provide for Ireland's future infrastructure development.

The report also highlighted the average length of time taken by local authorities to make a decision on a planning application for a quarry was 34 weeks and that the average timeframe for An Bord Pleanála to make a decision was 42 weeks.

The report concluded that a link must be made between the need for Ireland's future housing and infrastructure and the raw material supply chain that enables them to be delivered and that this raw material supply chain is identified and protected.

The report made a case for stronger national policy and follow-through at regional and local levels with regional assemblies and local authorities making provision for much more explicit protection of strategic aggregate resources within their functional areas. To this end the report suggested the following:

- > that resources within the three regional assemblies could be pooled to avail of specialist expertise in local authorities;
- > that development plans should give due regard to the information contained in the Geological Survey Ireland (GSI) Aggregate Potential Mapping resource maps when considering policy for the protection and zoning of raw material reserves;<sup>6</sup> and
- > that strong and consistent enforcement is required by planning authorities to ensure all extractive industry operators uphold planning requirements so that only authorised operations supply the marketplace and consumers and citizens can have confidence in the reputation of the extractive industry sector.

<sup>6</sup> GSI, a division of the Department of the Environment, Climate and Communications (DECC) has undertaken a substantial body of work identifying aggregate reserves across local authority areas. This information is available to inform both forward planning and development management functions of local authorities.



The report also suggested that:

- > a policy of procuring materials only from authorised sources by the state and local authorities would protect the environment and support compliant businesses;
- > national EoW criteria to facilitate the processing and reuse of recycled aggregates in the construction chain within a supportive planning framework should be adopted; and
- > proactive and practical steps to address knowledge and understanding gaps within the planning system on the unique nature, duration and impacts of quarrying should be taken.

## 1.2 Project Scope and Method

Scope:

It should be noted that whilst there are references to mines and minerals throughout this case study paper, the focus of this case study paper is on quarries and their related aggregates. There are different regulatory regimes in place for aggregates quarrying and minerals.

'Minerals' are those listed in the Schedule to the Minerals Development Acts 1940 to 1999 (the Minerals Development Acts) and include all substances in, on or under the ground except:

- > the agricultural surface of the ground;
- > turf or peat;
- > stone, sand, gravel or clay (quarries are regulated through the planning process by local authorities); and
- > petroleum.

In practice, this means that most quarries producing, for example, aggregates, dimension stone or agricultural lime do not work '*minerals*' as defined in the Minerals Development Acts.

There are a small number of exceptions, involving quarries that work specified industrial minerals listed in the Schedule to the Minerals Development Acts.

Minerals policy is set by:

Critical Raw Materials for the Circular Economy Transition; Policy Statement on Mineral Exploration and Mining Dec 2022 (DECC).

Method:

The project method for the preparation of this case study paper comprised three key phases as illustrated in Figure 2 below.



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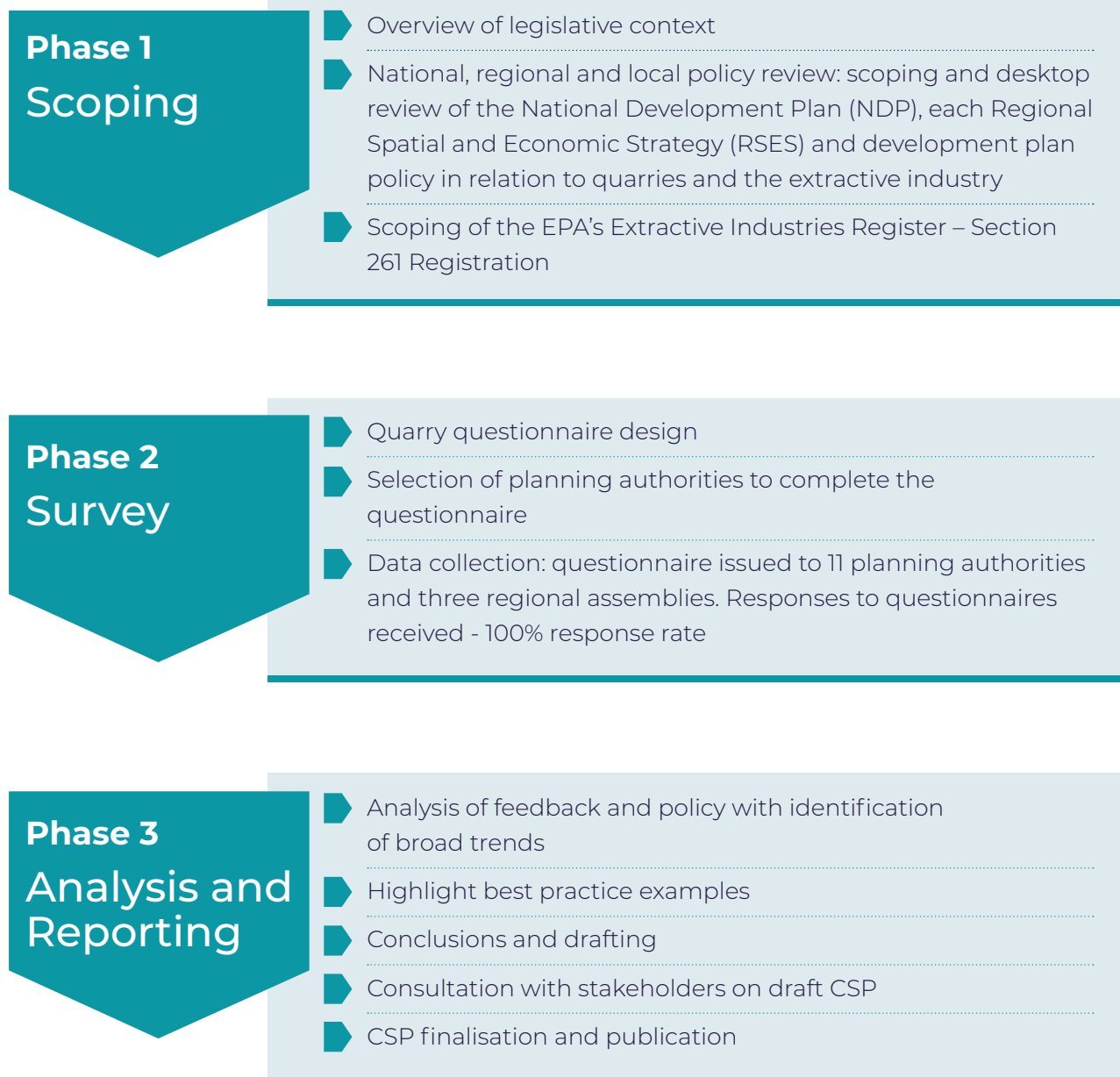
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**Figure 2 - Project Method.**



# 2.0 Strategic and Statutory Policy Context

The strategic and statutory context for quarries and the extractive industry in Ireland is shaped by a framework of national, regional and local policy. This section sets out the relevant legislation, policies and strategies that form a broad backdrop to the extractive industry sector.

## 2.1 National Planning Framework (NPF)

The **NPF** acknowledges the importance of the extractive industries in the supply chain and highlights the role of the planning process in realising the potential of the extractive industries sector by identifying and protecting important reserves of aggregates and minerals from development that might prejudice their utilisation.

The NPF identifies that aggregates and minerals extraction will continue to be enabled where this is compatible with the protection of the environment and provides for appropriate site rehabilitation.<sup>7</sup>

The **Draft First Revision to the National Planning Framework** (2024) reflects the wider changes to the policy context at EU<sup>8</sup> and national level particularly in relation to climate and biodiversity.

## 2.2 Regional Spatial and Economic Strategy (RSES)

The Regional Spatial and Economic Strategies (RSESs) for each of the three regional assemblies, established under the Local Government Reform Act 2014 (as illustrated in Figure 3 below), set out the strategic planning and investment framework to shape future growth and to better manage regional planning and economic development in each region.

The RSES is required<sup>9</sup> to address many themes including employment, housing, transport, water services, energy and communications, waste management, environment and heritage, landscape, sustainable development and climate change.

<sup>7</sup> National Policy Objective (NPO) 23, page 78 of NPF refers.

<sup>8</sup> For example, including: the European Green Deal, the **EU Biodiversity Strategy for 2030**, the **European Critical Raw Materials Act** (2024).

<sup>9</sup> Section 23 of the 2000 Act.



**Figure 3 - Map Showing the Three Regional Assemblies.**



**Source:** Project Ireland 2040 National Planning Framework, 2018

The RSES for the **Eastern and Midland Regional Assembly (2019–2031)** (EMRA) expressly underlines the role of extractive industries, together with other traditional sectors such as agriculture and forestry, in the wider enabling and sustaining of the rural economy and job creation in rural areas.<sup>10</sup> The RSESs for both the **Southern Regional Assembly (2020–2031)** (SRA) and the

**Northern and Western Regional Assembly (2020–2032)** (NWRA) set out a broad range of policies to support landscape, heritage, the circular economy, climate change, regional and economic development, whilst not expressly referencing quarries or the extractive industry. Following the adoption of the first revision to the NPF, there will be a requirement to commence the review of the RSESs within six months.

<sup>10</sup> EMRA's RSES contains RPO 6.7: "Support local authorities to develop sustainable and economically efficient rural economies through initiatives to enhance sectors such as agricultural and food, forestry, fishing and aquaculture, energy and **extractive industries**, the bioeconomy, tourism, and diversification into alternative on-farm and off-farm activities, while at the same time noting the importance of maintaining and protecting the natural landscape and built heritage."

## 2.3 Housing for All – A New Housing Plan for Ireland, Department of Housing, Local Government and Heritage

Under the government's **Housing for All – A new Housing Plan for Ireland** (2021) strategy, Housing Policy Objective 23 sets out a range of measures to reduce construction costs and drive economic sustainability. These include certification of modern methods of construction, expanding the National Standards Authority of Ireland (NSAI) Agrément approach, providing exemptions for C&D waste from a proposed waste recovery levy, reducing C&D waste and demand for virgin raw materials.

The Department of Housing, Local Government and Heritage (DHLGH) in collaboration with the Geological Survey Ireland (GSI) are members of a working group on construction materials. This group examines matters relating to construction material price inflation, C&D waste, the circular economy and setting standards, including necessary research.

## 2.4 Legislative Context

Section 2(1) of the 2000 Act, provided a definition for a quarry (see Box 1).<sup>11</sup> While the 2000 Act will be replaced in full by the recently enacted Planning and Development Act 2024 (the 2024 Act), due for phased commencement over the coming months, the definition relating to a quarry remains substantially the same.<sup>12</sup>

The 2000 Act, set out the statutory requirements for the content of statutory plans and the obligation for consistency with higher order development objectives including those contained in the NPF and RSEs.

The 2000 Act required development plans to set out an overall strategy for proper planning and sustainable development of the area, including a written statement, plan(s) and objectives (both mandatory and discretionary, discussed further below).

Under Section 28 of the 2000 Act the Minister could issue guidelines to planning authorities regarding any of their functions. There was a requirement for planning authorities to have regard to the contents of these guidelines in the performance of their functions.

As indicated at the outset, the Ministerial Guidelines for Planning Authorities on Quarries and Ancillary Activities (2004) and the broad experience in relation to their implementation over the last 20 years are the main focus of this case study paper.

Another key feature of the 2000 Act was the requirement relating to the control of quarries set out under Section 261. This section obliged planning authorities to enter quarry information, located within their functional areas, into their register. These registers are a central focus of the Ministerial Guidelines for Planning Authorities on Quarries and Ancillary Activities (2004) referred to above and supporting circulars and are discussed further in Section 2.5 of this case study paper.

While the focus of this case study paper is on plan-making, account has also been taken of:

- > the registration process (Section 261 of the 2000 Act); and
- > the development management process including the requirements in relation to Environmental Impact Assessment (EIA) as provided for in Part X of the 2000 Act and Schedule 5 of the Planning and Development Regulations 2001, as amended (the 2001 Regulations).

<sup>11</sup> Section 2(1), Interpretation, of the 2000 Act.

<sup>12</sup> Section 353(9) of **the 2024 Act**.





The relevant criteria/thresholds for mandatory EIA include:

- > 25 hectares for quarries and open-cast mines;<sup>13</sup>
- > 5 hectares for extraction of stone, gravel, sand or clay;<sup>14</sup>
- > for all extraction of minerals within the meaning of the Minerals Development Acts, 1940-1999;<sup>15</sup> and
- > all installations for the manufacture of cement.<sup>16</sup>

Under the provisions of the 2000 Act it is also important to note that sub-threshold development requires preliminary screening and/or screening.<sup>17</sup>

Finally, with regard to planning enforcement the 2000 Act expressly states that a warning letter or enforcement notice and proceedings in relation to any unauthorised quarry development may be issued at any time.<sup>18</sup>

## 2.5 Ministerial Guidelines for Planning Authorities on Quarries and Ancillary Activities (2004)

These guidelines form the primary reference document for this case study paper. When the guidelines were published in 2004 they highlighted that millions of tonnes of aggregates are needed *“to meet housing demand alone, with additional demand arising from the construction of other buildings and infrastructure.”*

The guidelines address each element of the planning system relative to quarries, including development plans, development management and the Section 261 Registration Process.

The key areas in the guidelines relating to plan-making are outlined in Table 1 below.

<sup>13</sup> Planning and Development Regulations, 2001 (as amended), Schedule 5, Part 1, Class 19.

<sup>14</sup> Planning and Development Regulations, 2001 (as amended), Schedule 5, Part 2, Class 2(b).

<sup>15</sup> Planning and Development Regulations, 2001 (as amended), Schedule 5, Part 2, Class 2(c).

<sup>16</sup> Planning and Development Regulations, 2001 (as amended), Schedule 5, Part 2, Class 5(b).

<sup>17</sup> For more background on EIA screening refer to the OPR's **Practice Note PN02 - Environmental Impact Assessment Screening** (2021).

<sup>18</sup> Section 157(4)(ab) of the 2000 Act.

**Table 1 - Key Messages from the Ministerial Guidelines for Planning Authorities on Quarries and Ancillary Activities (2004) relating to Development Plans.**

<b>Overarching Goal</b>	To ensure coherence and integration in the policies and objectives of the plan.
<b>Plan Aims and Strategy</b>	<ul style="list-style-type: none"> <li>&gt; Identify the aims of the plan and set out a key strategy for their achievement;</li> <li>&gt; Acknowledge the economic value of areas containing significant aggregate resources particularly where they are of national or regional importance; and</li> <li>&gt; Identify the location of major deposits and include safeguarding measures to enable future extraction.</li> </ul>
<b>Evidence Based Objectives and Policies</b>	<p>The objectives and policies should be based upon and utilise the data and mapping available from the GSI including:</p> <ul style="list-style-type: none"> <li>&gt; The National Quarry Database (which lists active pits, mines and quarries);</li> <li>&gt; Groundwater protection zones, hydrogeological data;</li> <li>&gt; Aquifers;</li> <li>&gt; Vulnerability;</li> <li>&gt; Outcrop and depth to bedrock;</li> <li>&gt; Subsoils geology; and</li> <li>&gt; Bedrock geology.</li> </ul> <p>Objectives and policies should be informed by mapping and high landscape value designations and other designations including:</p> <ul style="list-style-type: none"> <li>&gt; European sites (Natura 2000 network);</li> <li>&gt; Natural Heritage Areas (NHAs);</li> <li>&gt; Nature Reserves; and/or</li> <li>&gt; Areas of significant archaeological potential.</li> </ul> <p>Policy should clearly indicate that quarries will not be permissible in these locations unless it can be demonstrated that such quarries would not have significant adverse impacts on amenities or the environment.<sup>19</sup></p>
<b>Development Control Objectives</b>	Overall these should identify the local factors for the plan area that relate to the environmental issues with quarries, their mitigation and management through development management.
<b>Legislative Requirements</b>	<p>Relevant Development Plan Mandatory Objectives<sup>20</sup> including:</p> <ul style="list-style-type: none"> <li>&gt; The conservation and protection of the environment including, in particular, the archaeological and natural heritage and the conservation and protection of European sites and any other sites (such as NHAs);</li> <li>&gt; The preservation of the character of the landscape, including preservation of views and prospects and the amenities of places and features of natural beauty;</li> </ul> <p>Relevant First Schedule Discretionary Objectives<sup>21</sup> including:</p> <ul style="list-style-type: none"> <li>&gt; Regulating, promoting or controlling the exploitation of natural resources;</li> <li>&gt; Protecting and preserving the quality of the environment, including the prevention, limitation, elimination, abatement or reduction of environmental pollution and the protection of waters, groundwater, the seashore and the atmosphere;</li> <li>&gt; Securing the reduction or prevention of noise emissions or vibrations; and</li> <li>&gt; Preventing, remedying or removing injury to amenities arising from the ruinous or neglected condition of any structure or from the objectionable or neglected condition of any land.</li> </ul>

**Source:** Ministerial Guidelines for Planning Authorities on Quarries and Ancillary Activities (2004).

<sup>19</sup> Paragraph 2.3 of the **Ministerial Guidelines for Planning Authorities on Quarries and Ancillary Activities (2004)**.

<sup>20</sup> Section 10(2) of the 2000 Act.

<sup>21</sup> First Schedule of the 2000 Act - Purposes for which objectives may be indicated in Development Plan.



**Box 1 - Key Definitions Relevant to Quarries and Ancillary Activities.**

## Box 1. Extract from the 2000 Act

### Section 2, Interpretation

**“quarry”** means an excavation or system of excavations made for the purpose of, or in connection with, the getting of minerals (whether in their natural state or in solution or suspension) or products of minerals, being neither a mine nor merely a well or bore-hole or a well and bore-hole combined, and shall be deemed to include—

- (i) any place on the surface surrounding or adjacent to the quarry occupied together with the quarry for the storage or removal of the minerals or for the purposes of a process ancillary to the getting of minerals, including the breaking, crushing, grinding, screening, washing or dressing of such minerals but, subject thereto, does not include any place at which any manufacturing process is carried on;
- (ii) any place occupied by the owner of a quarry and used for depositing refuse from it but any place so used in connection with two or more quarries, and occupied by the owner of one of them, or by the owners of any two or more in common, shall be deemed to form part of such one of those quarries as the Minister may direct;
- (iii) any line or siding (not being part of a railway) serving a quarry but, if serving two or more quarries shall be deemed to form part of such one of them as the Minister may direct;
- (iv) a conveyor or aerial ropeway provided for the removal from a quarry of minerals or refuse.

**“mine”** means an excavation or system of excavations made for the purpose of, or in connection with, the getting, wholly or substantially by means involving the employment of persons below ground, of minerals (whether in their natural state or in solution or suspension) or products of minerals.

**“minerals”** includes stone, slate, clay, gravel, sand and other natural deposits except peat.

**Source:** Planning and Development Act 2000, Section 2, Interpretation.

## 2.5.1 Development Management

While the focus of this case study paper is on development plan preparation and the registration of quarries, it is nonetheless useful to highlight key messages from the Ministerial Guidelines for Planning Authorities on Quarries and Ancillary Activities (2004) in relation to development management.<sup>22</sup>

Such development management considerations tend to, or should inform, the plan and its policies and objectives, taking account of both local circumstances and nationally strategic aims.

<sup>22</sup> The guidelines recommend that planning authorities are familiar with the EPA's **Environmental Management Guidelines - Environmental Management in the Extractive Industry (Non-Scheduled Minerals)** (2006).

**Table 2** - Development Management Considerations Outlined in the Ministerial Guidelines for Planning Authorities on Quarries and Ancillary Activities (2004).

### Environmental Issues and Possible Mitigation Measures associated with Quarries

- > Noise and Vibration
- > Dust Deposition/Air Quality
- > Water Supply and Groundwater
- > Natural Heritage
- > Landscape
- > Traffic Impact
- > Cultural Heritage
- > Waste Management

### Pre-Application Consultation

(as provided for under Section 247 of the 2000 Act).

The following publications are noteworthy in this context:

- > Section 28 **Development Management - Guidelines for Planning Authorities** (2007)
- > The OPR's **Case Study Paper CSP04 - Pre-Application (S247) Consultation Services** (2021)

### Assessment of Planning Applications and Undertaking EIA

The following publications may be helpful in this regard:

- > Section 28 **Guidelines for Planning Authorities and An Bord Pleanála on Carrying out Environmental Impact Assessment** (2018)
- > The OPR's **Practice Note PN01 - Appropriate Assessment Screening for Development Management** (2021) and **Practice Note PN02 - Environmental Impact Assessment Screening** (2021)

### Planning Conditions and Financial Bonds

The following publications are noteworthy in this context:

- > Section 28 **Development Management - Guidelines for Planning Authorities** (2007)
- > The OPR's **Practice Note PN03 - Planning Conditions** (2022)



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### 2.5.2 Section 261 Registration Process

Many quarries were operational before planning legislation came into effect in October 1964.<sup>23</sup> Over the years, quarry developments have been subject to significant litigation. Under Section 261 of the 2000 Act a new system for the once-off registration for all quarries was introduced. This section commenced on 28 April 2004,<sup>24</sup> in tandem with the publication of the Ministerial Guidelines for Planning Authorities on Quarries and Ancillary Activities (2004). Only those quarries, for which planning permission was granted in the five years before Section 261 became operative, were excluded from the register.

The purpose of the register was to give a 'snapshot' of the land used for quarrying as planning permission may then be required for any expansion or intensification of operations. The register also informed where new controls were needed on the operation of certain quarries and some quarries had to comply with new conditions.

Quarries that had commenced operating before 1 October 1964, which were likely to have significant effects on the environment, had to seek planning permission for their continued operation and submit an Environmental Impact Statement (EIS) to the planning authority.

It is important to acknowledge that there were further significant amendments to Section 261 in 2010. These emerged as a result of a decision from the European Court of Justice (ECJ),<sup>25</sup> and resulted in further regularisation of quarries with curtailments on retention applications and the introduction of substitute consent. Under these amendments planning authorities were required to examine every quarry in its area to determine whether an EIA, screening for EIA or an Appropriate Assessment would have been required and publish relevant notices of its determinations in a newspaper and on its website.<sup>26</sup>



<sup>23</sup> The Local Government (Planning and Development) Act 1963 came into effect on 1 October 1964.

<sup>24</sup> **S.I. No. 152/2004 - Planning and Development Act (Commencement) Order 2004.**

<sup>25</sup> C-215/06 in July 2008.

<sup>26</sup> Section 261A of the 2000 Act and related provisions Guidelines for Planning Authorities (January 2012). Section 261A of the 2000 Act and related provisions Supplementary Guidelines for Planning Authorities (July 2012).



## 2.6 Transboundary Context

### 2.6.1 Transboundary Consultation

Transboundary consultation is a requirement of the plan-making and associated Strategic Environmental Assessment (SEA) process.<sup>27</sup> Furthermore, the 2000 Act and the 2001 Regulations require comments from other affected states<sup>28</sup> to be summarised and addressed in the planner/inspector's report on individual planning applications for quarry developments. Amendments to the planning regulations in 2022 were made to transpose higher legislative changes into the planning system. This included changes to the public consultation process and practical administrative management of submissions made by members of the public in transboundary state(s).<sup>29</sup>

### 2.6.2 Northern Ireland

Having regard to the transboundary nature and regional impact of quarries the Department for Infrastructure in Northern Ireland provided the following information in relation to quarrying and mineral extraction in Northern Ireland.

The planning legislative context for mineral extraction is set out in the Planning Act (Northern Ireland) 2011 and other subordinate legislation which can be found [here](#). The planning policy context relevant to minerals development is set out in:

#### The Regional Development Strategy (RDS) 2035

The RDS 2035 (2012) has no specific guidance regarding mineral proposals but recognises the importance of sustaining the rural area through facilitating the development of rural industries, businesses, and enterprises in appropriate locations. It also seeks to conserve, protect and, where possible, enhance the built heritage and the natural environment.

#### The Strategic Planning Policy Statement (SPPS)

The SPPS (2015) sets out the regional strategic planning policy context for Northern Ireland and recognises the requirement to balance the need for mineral resources against the need to protect and conserve the environment. Paragraphs 6.148 to 6.167 are relevant to minerals development.

#### A Planning Strategy for Rural Northern Ireland (PSRNI) and other relevant planning policy statements

The SPPS advises that until such times as a Plan Strategy for a local council area has been adopted, existing policy within specified retained documents will apply. Retained policy including a PSRNI, contain planning policies specific to mineral development, and are available to view [here](#).

<sup>27</sup> Article 8 of the SEA Directive requires that the Environmental Report, the opinions expressed by the environmental authorities and the public, and the outcome of any transboundary consultation, must be taken into account during the preparation of the plan and before its adoption (Development Plans - Guidelines for Planning Authorities (June 2022)).

<sup>28</sup> Including an affected Member State of the European Union or other party to the Transboundary Convention. The UK, whilst no longer an EU member state, is a Party to the Espoo Convention, transboundary consultation occurs under the provisions of the Convention, rather than Article 7 of the EIA Directive.

<sup>29</sup> Circular Letter: EUIPR 04/2022 and EUIPR 05/2022, refer.

Local councils are responsible for bringing forward detailed local operational planning policies in their local development plans. Other bodies and organisations directly involved in mineral extraction and quarrying include the Geological Survey Northern Ireland, the Mineral Products Association Northern Ireland and the Quarry Inspector within the Health and Safety Executive.

## 2.7 Other Relevant Policy and Legislation

Aside from planning legislation there are a range of other relevant strategies and legislation in relation to quarries and the extractive industry, some of which are outlined below.

### 2.7.1 National Level: Extractive Industries Register, EPA

The Waste Management (Management of Waste from the Extractive Industries) Regulations 2009 (S.I. No. 566 of 2009) came into effect on 31 December 2009. These regulations required each local authority to establish and maintain a register<sup>30</sup> of all extractive industries within its functional area including the extraction, treatment and storage of mineral resources, the working of quarries, and the extraction, treatment and storage of peat.

The EPA maintains an Extractive Industries Register.<sup>31</sup> Local authorities register extractive industries with the EPA via the Environmental Data Exchange Network (EDEN) online portal.<sup>32</sup>

### 2.7.2 Other Environmental Licences

Quarry developments frequently have large fixed plant which are used to provide power for extraction and processing operations. Likewise, other uses are often co-located within the primary quarry site, such as asphalt and tarmacadam plants.

Depending on scale, ancillary uses may also require consents under other codes such as:

- > An Industrial Emissions (IE) Licence (EPA);
- > An Integrated Pollution Control (IPC) Licence (EPA);
- > Discharge licences under Sections 4 and 16 of the Local Government (Water Pollution) Acts, 1977-1990 (Local Authority);
- > Waste water licence/certificate under the Waste Water Discharge (Authorisation) Regulations 2007 (EPA); and/or
- > Registration of any associated medium combustion plant (except where covered by an IE or IPC licence) in accordance with the **European Union (Medium Combustion Plants) Regulations 2017**.

<sup>30</sup> Regulation 19(1) of the Waste Management (Management of Waste from the Extractive Industries) Regulations 2009.

<sup>31</sup> The EPA's Extractive Industries Register can be viewed **here**.

<sup>32</sup> EPA Guidance and user manual is available **here**.



## Abstractions

Water abstraction is a significant emerging regulatory area for the extractive industry sector.

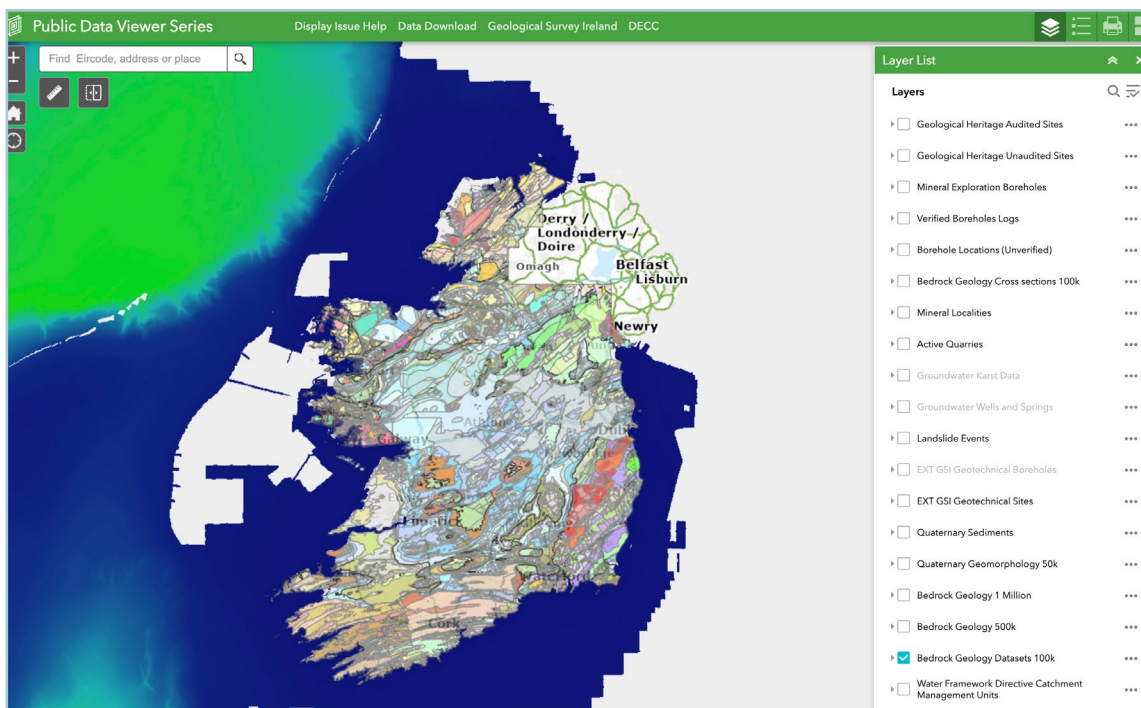
Recent legislative changes<sup>33</sup> require any abstractions greater than 2,000m<sup>3</sup>/day to apply for a licence, existing abstraction must make an application by 28 February 2025. For abstractors between 25-1,999m<sup>3</sup>/day the EPA will assess to determine if a licence is required. These changes introduce a potential authorisation requirement for the extractive industry sector. The EPA is currently developing an on-line system and guidance.<sup>34</sup>

## 2.7.3 Geological Survey Ireland (GSI)

The GSI is a division of the Department of Environment, Climate and Communication (DECC), and provides data and maps on Ireland's subsurface. Under the minerals programme the GSI maintains a **National Quarry Database** which lists active pits, mines and quarries. The GSI actively promotes engagement with the planning system and provides a wealth of resources through their programme **Geoscience for Planning**.

Also, under the GSI **Groundwater Programme** there is significant data and mapping resources relevant to quarry developments, including reports on Groundwater Body Descriptions, Source Protection Zones and Groundwater Protection Schemes. GSI's **Public Data Viewer Series** can be seen in Figure 4 below.

**Figure 4** - GSI Public Data Viewer Series.



**Source:** Geological Survey Ireland.

<sup>33</sup> The Water Environment (Abstractions and Associated Impoundments) Act 2022 and the Water Environment (Abstractions and Associated Impoundments) Regulations 2024 came into operation on 28 August 2024. These revoked the former European Union (Water Policy) (Abstractions Registration) Regulations 2018 (S.I. No. 261 of 2018).

<sup>34</sup> The EPA website has further information [here](#).



### 2.7.4 Whole of Government Circular Economy Strategy 2022-2023 - Living More, Using Less

This strategy was prepared by DECC and is Ireland's first national circular economy strategy. Preparation of the strategy was a specific commitment in **A Waste Action Plan for a Circular Economy - Ireland's National Waste Policy 2020-2025** (WAPCE). The strategy explains why Ireland needs to achieve a circular economy.

On enactment in 2022, the Circular Economy and Miscellaneous Provisions Bill placed the Circular Economy Strategy on a statutory footing, making the ongoing development of circular economy policy a legal requirement of government.

National circular economy policy development, by government and the wider public sector, is carried out in the first instance by a Circular Economy Working Group chaired by DECC.

The provisions of the 2020 Programme for Government, Our Shared Future included a range of actions to support the transition to a circular economy. These provided for the establishment of a cross-government Circular Economy Unit in DECC and the adoption of a circular economy strategy. The 2025 Programme for Government – Securing Ireland's Future continues to support the promotion of a circular economy.

The Strategy highlights that increasing extraction of natural resources and disposal of waste is a major contributor to habitat and biodiversity loss and contributes to global warming. Half of total greenhouse gas (GHG) emissions and more than 90% of biodiversity loss and water stress come from resource extraction and processing, therefore achieving a circular economy will play an important part in reducing global carbon impact and protecting natural resources, environment and health.



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The Strategy states that within the C&D sector, greater resource efficiency and resource re-use could avoid the need for millions of tonnes of virgin raw materials per annum, as well as reducing the carbon intensity of our built environment. It suggests that reducing the volume and associated costs of C&D waste could contribute to greater affordability, particularly in relation to the high-density residential sector. The Strategy concludes that access to resources will increasingly be a strategic consideration for developed and developing nations alike. Natural resources continue to provide crucial raw materials that are used across the global economy. Transitioning to a circular economy which reuses and retains the value of these resources and materials will support rising living standards without putting unsustainable pressure on the global environment.

Potential actions for inclusion in sectoral circular economy roadmaps have been outlined for the construction sector within the Strategy and include increased use of offsite design and manufacture, modular building design, refurbishment and retrofitting existing stock, tackling dereliction and increased use of C&D waste as a secondary construction material.

### 2.7.5 Ireland's State of the Environment Report 2024, EPA

This **report** was published by the EPA in 2024 and presents the most recent integrated information on the quality of Ireland's environment. It also provides an update on the environmental challenges that are faced nationally and globally.

The report acknowledges the National Climate Objective provided for in the Climate Action and Low Carbon Development (Amendment) Act 2021 that Ireland transition to a climate-resilient, biodiversity-rich, environmentally sustainable and climate-neutral economy by 2050.

The report identifies that mining and quarrying affected 32% of protected habitats; this was due to the negative direct effects on habitats of the extraction of minerals and the impacts of peat extraction.

The report also highlights that using primary materials rather than secondary materials is the norm in Ireland as evidenced by Ireland's low material circularity rate (1.8% in 2022 compared with an EU average of 11.5%).

National targets set out in the National Waste Management Plan for a Circular Economy 2024-2030 are highlighted in the report. Target 1B in relation to construction materials requires a 12% reduction in C&D waste by 2030.

In relation to environmental policy implementation and performance, the report notes that the circular material use rates remain very low by comparison to the European average. The report suggests that Ireland must address this in moving from a linear to a circular economy.

### 2.7.6 Circular Economy and Waste Statistics Highlight Report 2022, EPA

This **report** was published by the EPA and highlights that the transition to a circular economy needs to be accelerated as Ireland is generating high levels of waste. A total of 15.7 million tonnes was generated in 2022.

The report notes that Article 27 of the European Communities (Waste Directive) Regulations, 2011, prevented soil and stone being designated as waste and that in 2022 over 2.6 million tonnes of soil and stone was determined as by-product and diverted from waste.

The report states that most C&D waste treated in Ireland was recovered by backfilling (81%), while 7% went for disposal and only 10% was recycled.



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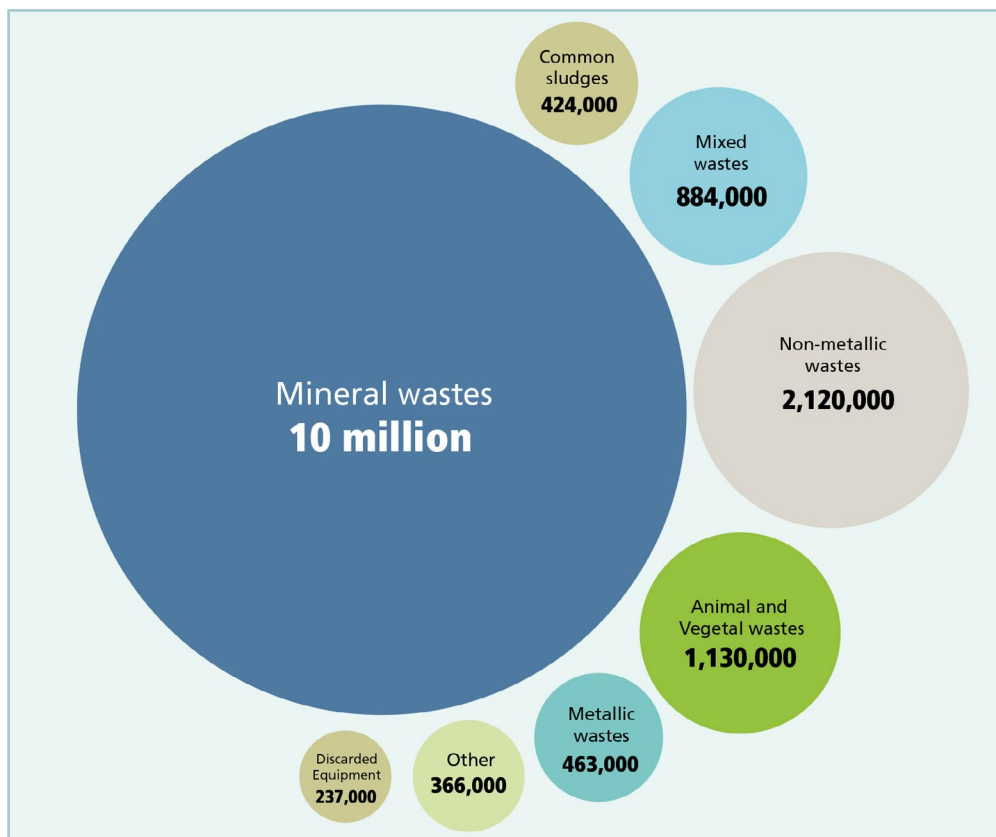
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**Figure 5 - Waste Generation by Material Type (Tonnes).**



**Source:** Circular Economy and Waste Statistics Highlight Report 2022, EPA.

The EPA published **National End-of-Waste Criteria for Recycled Aggregates** (2023) and made numerous single-case EoW decisions for various other waste types.

As can be seen in Figure 5 above, mineral wastes are the largest waste material type, accounting for 10 million tonnes or two-thirds of all waste generated and includes:

- > Soil waste - 6.5 million tonnes;
- > Naturally occurring minerals (e.g. waste gravel, crushed rock, sand and clays) - 3 million tonnes; and
- > C&D wastes - 240,000 tonnes.

### 2.7.7 Health and Safety Guidance for Quarry Operations

As acknowledged in the Ministerial Guidelines for Planning Authorities on Quarries and Ancillary Activities (2004) health and safety issues associated with blasting are the responsibility of the Health and Safety Authority (HSA). The Health and Safety Act 1989, and the related Regulations on quarry operations were designed to protect those working in and visiting quarries and members of the public in the immediate vicinity who could be endangered by the operation of quarries.<sup>35</sup> The ICF Environmental Code for the aggregate and concrete product industries also contains guidance on the safe operation of quarries and the ICF have other resources for their members.

<sup>35</sup> HSA resources on the Quarrying Industry are available [here](#).



## 2.8 European Policy

### 2.8.1 The European Critical Raw Materials Act, European Commission

The EU's Critical Raw Materials Act (CRMA) received final approval on 18 March 2024 and came into effect in Ireland in May 2024 as a regulation and applies in all EU Member States. The European Commission has identified 34 Critical Raw Materials (CRM), including 17 Strategic Raw Materials (SRM) of high economic importance for the EU. Member States are required to implement national exploration programmes to increase knowledge of European mineral resources, including those present in extractive waste.

### 2.8.2 Construction Products Regulation - Regulation (EU) No 305/2011, European Parliament and the Council of the European Union

With effect from 1 July 2013, under **Regulation (EU) No 305/2011** (known as the Construction Products Regulation or the CPR), CE marking is mandatory for all construction products placed on the market in the European Economic Area.

The CPR aims to ensure that reliable performance-related data is made available, by means of '*Declarations of Performance*', in relation to construction products being placed on the European market. The primary purpose of the CPR is to break down technical barriers to trade in order to ensure the free movement of construction products across Member States within the European Union. Each Member State is free to set its own requirements on the performance of building works and, by virtue of same, construction products when in use. The choice of required performance values for specific intended uses to which construction products are put to rests with each Member State. The **Construction Products Regulation – Information Note** (June 2013) sets out the general objectives behind the CPR, the requirements that must be fulfilled in order to place construction products onto the market and the particular implications for manufacturers, importers and distributors.



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## 3.0 Overview of Extractive Industry Activities

This section provides an overview of extractive industry activities and it is split into two parts. The first part contains:

- > an analysis of available quarry data in Ireland;
- > the results from a desktop review of local authority Section 261 Registers (where published);
- > details of the information obtained from OPR local authority reviews;
- > information available from the last cycle of development plans adopted; and
- > an analysis of the national level Extractive Industries Register held by the EPA.

The first part (3.1 to 3.4) also contains a high-level review of 29 development plans to identify whether the Ministerial Guidelines for Planning Authorities on Quarries and Ancillary Activities (2004) were referenced or acknowledged.

In the second part of this section (3.5 and 3.6), the results from the primary research undertaken by the OPR are presented. This information was derived from the answers received to a questionnaire that was issued to 11 local authorities and the three regional assemblies.

### 3.1 Overview of Location of Extractive Industry Sites

#### 3.1.1 National Data – Extractive Industries Register, EPA

As outlined in Section 2.7.1, the EPA's Extractive Industries Register was developed to meet the requirements of the extractive waste regulations. Local authorities register their extractive industries with the EPA via the EDEN online portal. The specific regulation relating to the requirement to establish a register stipulated that the register was to be established by 31 December 2010 and maintained thereafter. Therefore, while this data is held and published by the EPA on a national register/platform, it is based on local authority level data. This register relies on updates from local authorities and these updates are generally dealt with through the local authority environment department.

#### 3.1.2 Local Data – Section 261 Registers and Development Plans

##### Section 261 Registers

The Section 261 register was a requirement of the 2000 Act and this registration process was undertaken by each planning authority. Section 261 was introduced on 28 April 2004 and required the owner or operator of a quarry, not later than one year from the coming into operation (27 April 2005), to provide to their planning authority, information relating to the operation of the quarry.

On receipt of the information, the planning authority was required to enter it onto the planning register.<sup>36</sup> This was a once-off registration process and many planning authorities published the registers on their websites. From the research undertaken for this case study paper, it would appear that approximately one third of local authorities have quarry registers available on their websites.

However, as noted in Section 2.5.2 above significant amendments were made to Section 261 in 2010. The new Section 261A, required each planning authority to examine every quarry within its functional area and to determine whether having regard to the EIA and Habitats Directives if any of the following were required but were not carried out:

- > an EIA;
- > a determination as whether an EIA is required; and
- > an Appropriate Assessment (AA).

This requirement provided an opportunity to update the local authority quarry registers.

### Development Plans

The local authority development plan is one of the principal sources of local data relating to the location of quarries and extractive industry sites. The OPR's research showed that the majority of development plans included references, to varying degrees, to extractive industry and quarrying activities, as is required by the Ministerial Guidelines for Planning Authorities on Quarries and Ancillary Activities (2004).

Approximately eight of the 29 adopted plans reviewed<sup>37</sup> quantified the number of quarries in their functional area to varying degrees. These plans were adopted between 2021 and 2024. Further observations from the OPR research are discussed below.

### 3.1.3 OPR Reviews

Under the OPR's Local Authority **Reviews Programme**, eight reviews have been completed since 2021. As part of that process, planning authorities shared details of their systems and procedures, and this data included details of the number of quarries in their functional area and provided further insight into their experience of both the Section 261 and 261A registration processes.

## 3.2 Data Limitations and Gaps

As outlined in Section 3.1.2 above, the requirement to prepare a register of quarries, as provided for under Section 261 of the 2000 Act, represented the first baseline survey of quarries in Ireland. In 2010, as noted in Section 3.1.1 above, under the waste management regulations a further national register for the purposes of these regulations was established by the EPA. With amendments to the 2000 Act and notably the addition of Section 261A, planning authorities were required to examine every quarry within their functional area.

Following the adoption of the NPF in 2018 and the subsequent adoption of the three RSEs by 2020, almost every development plan was reviewed and updated. As part of the plan-making process, many planning authorities undertook a review of their Section 261 registers.

<sup>36</sup> Section 7 of the 2000 Act.

<sup>37</sup> Note: at the time of this phase of the research, the Monaghan and Sligo Development Plans were not adopted.





As quarry developments are not static uses, with some having ceased use and other new uses established since the original quarry registrations system was put in place, it is acknowledged that the various data sources are not on the same time cycle.

In undertaking the desktop analysis of national and local level quarry registers and reviewing and interpreting this data as part of this case study paper, it is important to note the data limitations and the methodology employed to capture information. The analysis involved searching and collating data that was readily available. The results have not been validated directly with the local authorities and it is acknowledged that other records may be or may have previously been available. It is noted that not all local authorities have easily available mapping in relation to quarries. In addition, there is a lack of consistency of approach across local authorities in how data is collected, verified and reported which impacts the analysis. This in itself supports the need for further resourcing for the collation and ongoing collection of quarry data in order to improve monitoring and reporting.

### 3.3 National and Local Level Quarry Registers

As part of the OPR desktop analysis, a number of sources of information were examined to determine the local level data available on quarries. This included a review of Section 261 registers (where published by planning authorities) and local authority development plans.

Table 3 below provides an overview of quarry data available for each of the 31 local authorities and illustrates the differences between the number of quarries recorded on the EPA Extractive Industries Register and the number of quarries identified in other published data sources.<sup>38</sup>

<sup>38</sup> The source of data for the second column includes data from development plans, local authority websites and Section 261/S261A registers. An 'X' has been indicated where data was not available from these official local authority sources.

**Table 3** - Details of Quarry Data Available for the 31 Local Authorities.

	Number of Quarries – as identified in the EPA's Extractive Industries Register	Number of Quarries – as identified in other Published Data Sources (see note below)
<b>EMRA</b>		
Dublin City	0	0
Dún Laoghaire-Rathdown	0	X
Fingal	4	8
Kildare	19	40
Laois	31	55
Longford	13	15
Louth	13	12
Meath	76	160
Offaly	26	61
South Dublin	6	6
Westmeath	91	42
Wicklow	27	43
<b>NWRA</b>		
Cavan	32	X
Donegal	0	170
Galway City	4	0
Galway County	230	230
Leitrim	7	7
Mayo	90	0
Monaghan	14	X
Roscommon	82	116
Sligo	13	0
<b>SRA</b>		
Carlow	35	X
Clare	205	X
Cork City	0	0
Cork County	1	230
Kerry	142	X
Kilkenny	29	X
Limerick City and County	66	X
Tipperary	152	200
Waterford City and County	19	51
Wexford	36	0

**Note:** The source of data for the second column includes data from development plans, local authority websites and Section 261/S261A registers. An 'X' has been indicated where data was not available from these official local authority sources.

As can be seen in Table 3 above, when comparing the EPA's Extractive Industries Register with the most recent available local data, the figures across both columns do not correspond. It would have been expected that the most recent local level data would have matched the national register. These discrepancies indicate that the national register needs further updating.

Furthermore, it was observed from the research across the sources analysed that there are differences in the number of quarries registered. In part, this might be explained by the different timelines as discussed above. Notwithstanding differing timelines for collection of data, this highlights the need for an overall register that is regularly maintained.

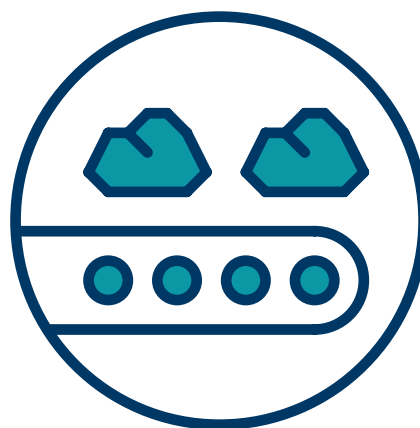
### 3.4 Provision for Extractive Industry Activities in Development Plans

The OPR review of development plans found that 80% referred to the Ministerial Guidelines for Planning Authorities on Quarries and Ancillary Activities (2004) and expressly included a written policy objective to support the guidelines. From the 29 development plans reviewed, only six did not specifically refer to or include a reference or written policy objective to this effect. It is acknowledged that this is a high level indicator and cannot be taken as an evaluation of the overall quality of the plans' policy objectives.

### 3.5 The Local Perspective – Planning Authority Questionnaire Analysis

To gain additional feedback, the three regional assemblies and 11 planning authorities were asked to complete a questionnaire relating to their existing development plan policy to gain an insight into their experience of implementation of the Ministerial Guidelines for Planning Authorities on Quarries and Ancillary Activities (2004). A range of planning authorities was selected to ensure a comprehensive, representative analysis for the purposes of the case study paper. This approach was to ensure a geographical spread, to include planning authorities managing quarries near protected landscapes and to capture those with a bespoke policy in place. 11 planning authorities were selected to complete the questionnaire in order to gain feedback and provide a more detailed review of existing development plan extractive industry policy across the country.

The 11 planning authorities chosen provide a fair geographical balance across the country, as illustrated in Map 1 below.



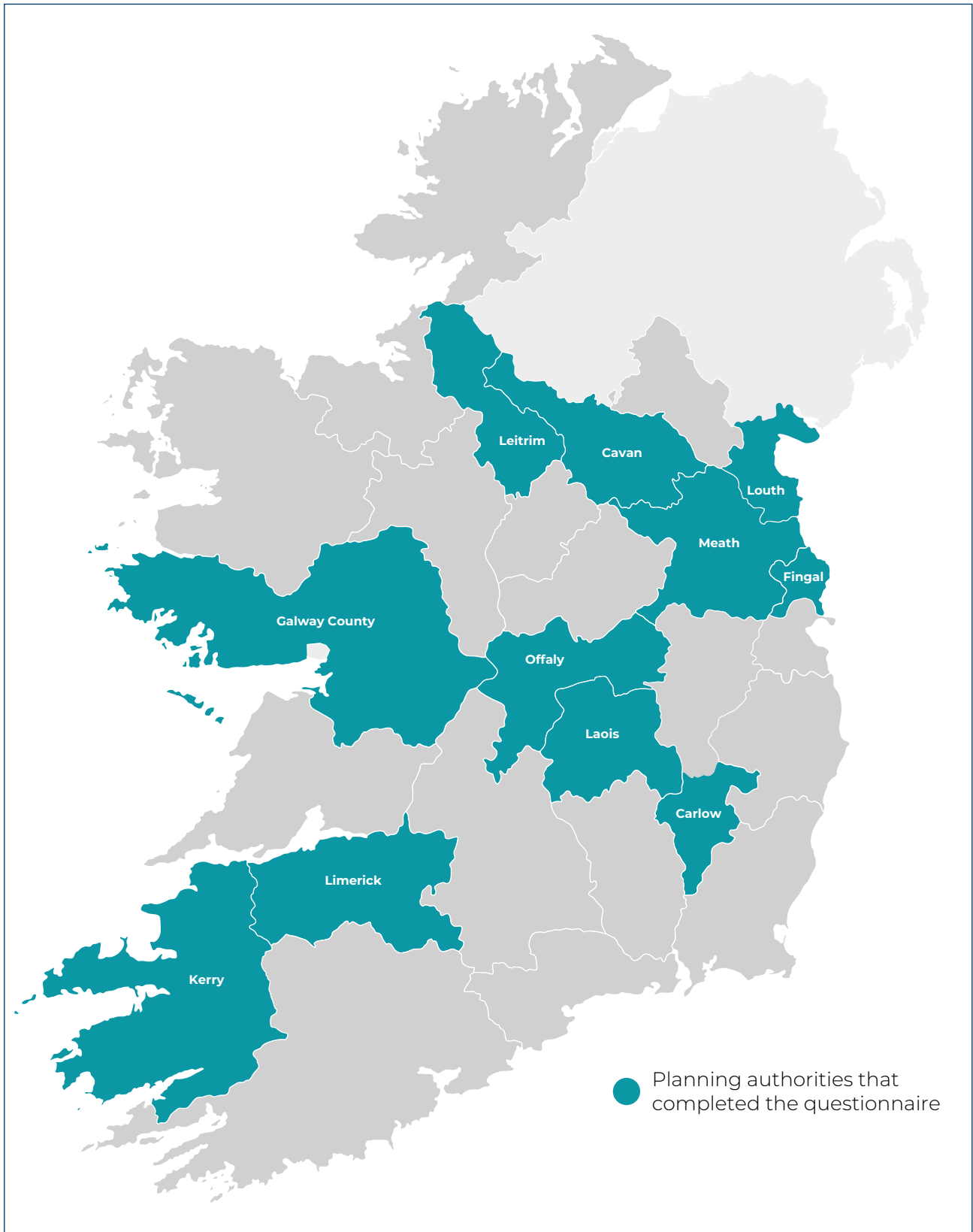
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**Map 1** - Planning Authorities that Completed the OPR Questionnaire.



**Table 4 - Rationale for the Selection of the 11 Planning Authorities.**

<b>Regional Assembly/ Local Authority</b>	<b>Rationale/ Reasons for Selection</b>
<b>EMRA</b>	
Fingal	A Dublin and coastal planning authority.
Laois	A midlands county within the heart of Ireland.
Louth	A border county with Northern Ireland and a county which contains a variety of natural resources.
Meath	Its County Development Plan contains bespoke policy in relation to the North-South Interconnector and the Brú na Bóinne UNESCO World Heritage site is located in the county.
Offaly	A county which contains peatlands and the Grand Canal.
<b>NWRA</b>	
Cavan	An inland border county, with proximity to Dublin and which historically produced pale sandstone from the Latt quarry dating back to the 19th century, evident in buildings such as Cavan Courthouse.
Galway County	A western coastal county.
Leitrim	Its County Development Plan has detailed extractive industry policy.
<b>SRA</b>	
Carlow	Contains the lime quarry at Clogrennane, which is Ireland's only producer of quicklime and hydrated lime products and is considered to be of Strategic National Importance.
Kerry	A southern coastal county which contains bogs and the Killarney National Park. Skellig Michael, a UNESCO World Heritage Site is also located within the county.
Limerick	A southwestern county on the River Shannon.

The main rationale for the selection of the planning authorities is set out in Table 4 above.

The main themes covered in the questionnaire were as follows:

- A. Quarry Registration
- B. Complaints and Enforcement
- C. Legislation, Guidelines and Mapping
- D. Experience and Suggestions

The questionnaire issued to the Regional Assemblies and planning authorities is included in Appendix A of this case study paper.

An analysis of the feedback received from each of the three regional assemblies and the 11 planning authorities is outlined in the following section.

### 3.5.1 Quarry Review

Table 5 below shows that out of the 11 planning authorities selected to complete the questionnaire, the majority of reviews of quarries were last carried out in 2012, with the exception of Laois and Leitrim, which were carried out in 2019 and 2022 respectively. Leitrim was the only planning authority, of the 11 surveyed, that indicated that routine surveys were undertaken every three years. Leitrim County Council confirmed that the survey comprises a combination of a desktop review using ortho-photography and satellite imagery together with site inspections.

### 3.5.2 Complaints and Enforcement

Quarry developments by their very nature and associated potential impacts have historically presented challenges for management and regulation. This is often borne out in complaints to the planning authority and the planning enforcement teams.

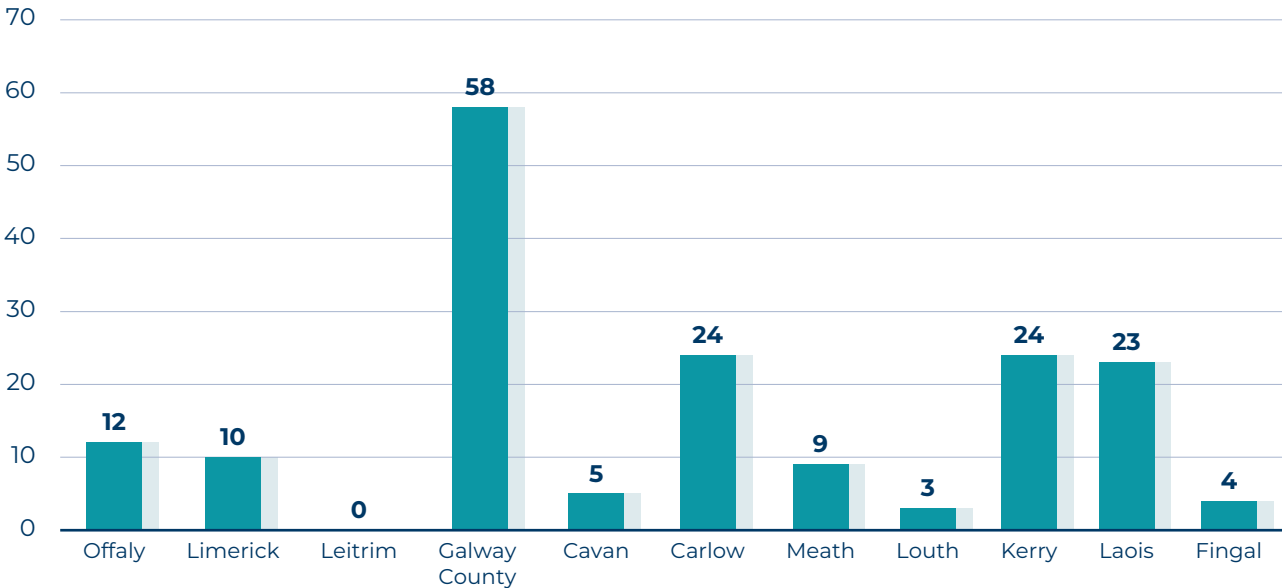
Enforcement procedures can often take considerable time to resolve and enforcement of unauthorised quarry developments can be notoriously complex and time consuming due to the complex nature of the development and its impact.

From the OPR's research, all of the 11 planning authorities with the exception of Leitrim, had live enforcement cases relating to quarry developments (as of end July 2024). Notably Galway County Council had 58 live enforcement cases in relation to quarry developments, with Carlow, Kerry and Laois having the next highest number of active cases. It is acknowledged that some of these cases were in the system for long periods and some relate to minor quarrying works. This has been outlined in Figure 6 below.

**Table 5 - Overview of the Review of Quarries Completed by the 11 Selected Planning Authorities.**

Planning Authority	Last Review of Quarries Carried Out (Year)	Routine Surveys Carried Out (Y/N)
Carlow	2012	No
Cavan	2011-2012	No
Fingal	2012	No
Galway County	2012-2013	No
Kerry	2012	No
Laois	2019	No
Leitrim	2022	Yes
Limerick	2012	No
Louth	2012	No
Meath	2013	No
Offaly	2012	No

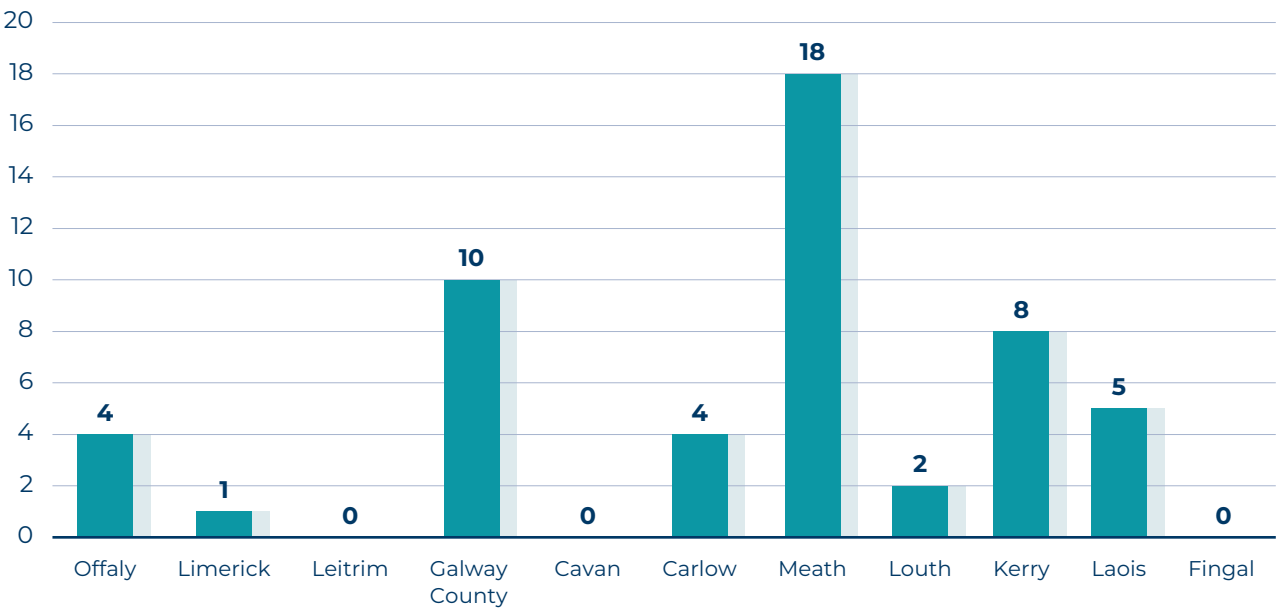
**Figure 6 - Quarry Cases Presently Under Investigation/at Various Stages of the Enforcement Process as at July 2024.**



As part of the OPR's survey, in order to compare the number of quarry-related complaints received across the 11 planning authorities, a question was included about complaints received in 2023.

In response, all, except three planning authorities, indicated that complaints were received in relation to a quarry development during 2023, with Meath County Council receiving the most complaints as can be seen in Figure 7 below.

**Figure 7 - Overview of the Number of Quarry Complaints Received in 2023 Across the 11 Selected Planning Authorities.**



**Table 6** - Number and Type of Complaints Received in 2023 across the 11 Selected Planning Authorities.

Planning Authority	Category of Complaint								
	Unauthorised / No permission	Hours of Operation	Traffic	Noise / Vibration	Dust / Air Quality	Water Supply and Ground Water	Landscape	Natural and Cultural Heritage	Waste and 'Other'
<b>Carlow</b>	1							1	2
<b>Cavan</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Fingal</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Galway County</b>		✓	✓	✓	✓		✓	✓	
<b>Kerry</b>	6	1				2			
<b>Laois</b>	✓		✓	✓	✓		✓		
<b>Leitrim</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Limerick</b>	10								
<b>Louth</b>	2								
<b>Meath</b>	1	2	1	3	2	1			8
<b>Offaly</b>	3						1		

### Number and Type of Complaints Received in 2023

The type of complaints received, by the 11 planning authorities, indicate that many complaints related to quarries with no planning permission and/or unauthorised activities. Thereafter, there are a range of aspects to the complaints with the principal areas of concern relating to noise/vibration and dust/air quality. Traffic, hours of operation, impact on water and amenities all feature as sources of local concern expressed in enforcement complaints received by the 11 planning authorities. See Table 6 above for more details.

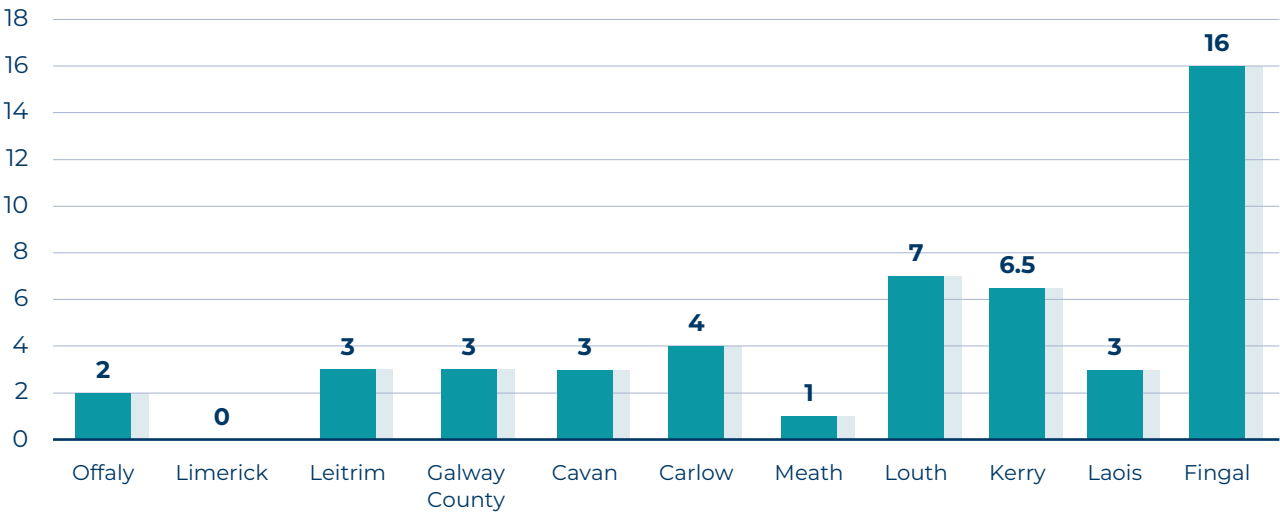
### 3.5.3 Staff Resources

Within all the planning authorities surveyed, the enforcement of quarries is dealt with as part of the wider enforcement function and there are no specific resources or teams dealing solely with quarry developments. This is likely representative of all planning authorities.

As can be seen in Figure 8 below, out of the 11 planning authorities selected to complete the quarry questionnaire Fingal, Louth and Kerry have the most staff assigned to the planning enforcement section. The 11 planning authorities were asked their opinion on whether the number of enforcement staff to deal with quarries was deemed to be sufficient. The results show that eight out of the 11 planning authorities stated that staffing numbers were considered to be inadequate to deal with the complex issues that arise when dealing with quarries.



**Figure 8 - Overview of Staff Assigned to Planning Enforcement Across the 11 Selected Planning Authorities as at July 2024.**



### 3.5.4 Legislation, Guidelines and Mapping

The 11 planning authorities stated that they found the implementation of Sections 261 and 261A of the 2000 Act complicated and lengthy. Supplementary guidelines were issued in 2012 to address this issue.

Table 7 below shows the availability of local authority quarry maps (as indicated by the selected 11 local authorities in the quarry questionnaire feedback) detailing whether these maps are publicly available or for internal use only.

**Table 7 - Availability of Local Authority Quarry Maps Across the 11 Selected Planning Authorities.**

Local Authority	Publicly Accessible	Internal Use Only
Offaly	✓ S261A quarries	✓ S261 registered quarries
Leitrim	✓	
Limerick	✓ [Those on the plan map system are visible to the public]	
Galway County	✓	
Fingal		✓
Cavan		✓ [S261 quarries mapped on GIS]
Carlow		✓
Meath	✓ [Maps used as part of S261 process available]	
Kerry		✓
Louth		✓ [Provided on request]
Laois	✓	

**Table 8** - The Types of Technology used by the 11 Selected Planning Authorities to Map Quarries.

Local Authority	Global Positioning System (GPS) Survey / Technology	Geographic Information System (GIS)	Geological Survey Ireland (GSI)	Aerial Photography, Ground Surveys, Google Maps and / or Planning Register	Drones	Quarries mapped based on drawings from S34 planning applications or S261 Registration
Meath	✓					
Carlow	✓					
Cavan		✓				
Fingal			✓			
Galway County					✓	
Kerry	✓					
Laois		✓				
Leitrim						✓
Limerick				✓		
Louth		✓		✓		
Offaly		✓		✓		✓

Table 8 above indicates the type of technology used to map quarries (as indicated by the selected 11 planning authorities in the quarry questionnaire feedback).

### 3.5.5 Experience and Suggestions

The 11 planning authorities were asked to describe any positive learnings, areas of difficulty and initiatives in relation to the registration, mapping, policy formation, approval and monitoring of quarries. The feedback received has been summarised below.

#### Positive Learnings

The planning authorities noted the benefits of establishing a baseline of quarry activity, building staff expertise and interdepartmental teams (which included environment, water services and roads sections) on specialised issues associated with extractive industries.

The planning authorities suggested that having a baseline of information on quarries in terms of the extent of quarry operations, aerial photography etc., had been beneficial in terms of policy formulation, development management assessments and as a reference to assess enforcement complaints received.

The planning authorities indicated that the 2004 registration process provided a snapshot of quarries in existence and produced a comprehensive list of quarries with mapped areas and extents, which assisted staff when dealing with enforcement files in particular.

The planning authorities confirmed that the Ministerial Guidelines for Planning Authorities on Quarries and Ancillary Activities (2004) and existing development plan policies and objectives were used for the purposes of formulating new policies and the assessment of planning applications for quarries. The planning authorities stated that the advice contained in the guidelines on how to assess a planning application for a quarry development and the possible planning conditions that could be attached to a decision to grant permission were helpful.

## Areas of Difficulty

Challenges reported in the responses received from the 11 planning authorities included interpreting complex aspects of the legislation and subsequent litigation, lack of specialist staff, inadequate mapping of quarries and insufficient timeframes to deal with these more complex planning applications. These are outlined hereunder:

### (a) Legislation

- (i) Interpreting legislation was identified as a challenge, with the issue of abandonment and the absence of strong guidance on this matter cited as a significant issue.
- (ii) Challenges in relation to establishing ownership were also mentioned.
- (iii) Establishing the correct and (then) current status was difficult which posed challenges in determining whether Appropriate Assessment (AA) was required.

### (b) Mapping

Planning authorities stated that Ordnance Survey Ireland maps were not updated regularly enough in order to ascertain exact years of commencement/extension of many quarries. The surveys carried out in 2012 were ground surveys and not aerial assessments therefore it was difficult to establish the intensification of quarry operations and the extraction area of quarries.

Furthermore, quarries that were not mapped were challenging to locate and difficulties were experienced relating to older planning applications with poor quality maps. Planning authorities signaled a need for enhanced monitoring of the physical extent of quarrying activities by drone surveys that could be arranged as a shared service between planning authorities.

Difficulties assessing extensions of quarries were also identified and the monitoring of compliance with conditions attached to planning permissions was challenging.

### (c) Staff Resources

A lack of staff with the required expertise/specialist staff who have been trained in understanding the aggregate industry and also the complex planning legislative parameters, e.g. court rulings in this area, was identified as an area of difficulty, particularly where environmental obligations are complex and open to litigation. There is a requirement for a multi-disciplinary team to be set up in each local authority to deal with the complex issues that these developments create (in terms of monitoring and compliance). Enforcement of quarries is time consuming and costly and utilises staff time, when resources are not sufficiently available. Statutory timeframes on planning applications are not considered to be sufficient considering the complexity and quantum of information contained in Environmental Impact Assessment Reports (EIARs). In addition, compliance submissions are often presented in a highly complex manner and it was suggested that templates would be beneficial.

## Initiatives

The planning authorities outlined a series of existing and desired initiatives related to the extractive industry such as funding initiatives, staff training initiatives and increased cooperation between the planning and environment sections within local authorities during registration, which resulted/could result in a more focused response to issues relating to quarries.



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Receiving legal opinion and training on recent legal cases assisted/could assist planning authorities with how to deal with future cases more effectively.

The planning authorities confirmed that the use of a Geographic Information System (GIS) made monitoring and surveying of quarries easier for the enforcement section in carrying out quarry inspections and assessments. Such a GIS should include a geo-locator of all authorised sites, together with their conditions (Section 261 and planning) and a digitised map showing the authorised boundary extent and floor depth of the quarry site. Routine and periodic surveys of quarries was suggested as good practice.

For example, Kerry County Council confirmed that as part of their Section 261 registration process, a GIS was set up, however, quarries subsequently granted planning permission were not included after the initial registration. Subsequently, as part of the Section 261A process, all quarries were surveyed in Kerry. This was deemed an invaluable exercise as it gave a snapshot of the extent and depth of all quarries at a particular time.

### 3.6 The Regional Perspective – Regional Assembly Questionnaire Feedback

The three regional assemblies responded to the questionnaire noting that they do not collect data on the number and type of quarries within their regions and that this data is collected by the local authorities. The regional assemblies stated that there is no statutory requirement for them to collect such data under the 2000 Act and that each local authority has a legal obligation to collect this under Section 261 and Section 261A.

In relation to the 2024 Act, referring to the repeal of Sections 261 and 261A of the 2000 Act, the regional assemblies stated that it would be useful to continue to register quarries under some appropriate legislative process. Whilst the register is under the supervision of the relevant local authority, there may be a case to be made for the creation of a register which encompasses the whole country, which would be available via a Departmental or OPR website. Similarly, the regional assemblies considered a register of quarries to be a useful mechanism to assist with the control of quarries and quarry developments, particularly where unauthorised development has been an issue. The recording of data for active quarries and extractive industries in the regions is thought to be a useful evidence-based record of the intensity of extractive industries at local authority level.

The regional assemblies indicated that while they had limited involvement with quarries, the Ministerial Guidelines for Planning Authorities on Quarries and Ancillary Activities (2004) had been referenced in regional assembly submissions on draft development plans where they had recommended incorporation of the provisions of the guidelines into the development plans. The regional assemblies indicated that such submissions had not always been implemented resulting in some development plans not having robust policies relating to quarries.

All of the regional assemblies agreed that there is an opportunity through the RSES review to consider including Regional Policy Objectives (RPOs) relating to the extractive industry, as appropriate.

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The regional assemblies stated that since the Ministerial Guidelines for Planning Authorities on Quarries and Ancillary Activities (2004) were published, the application of EIA and AA assessments of quarry-related development including site restoration plans has been the most significant development and that the Section 261A process was introduced as an amendment of the 2000 Act to address this requirement including provisions for substitute consent applications to be made to An Bord Pleanála for proposed retention development.

The regional assemblies have not undertaken any mapping of quarries in their regions and they suggested that local authorities are better positioned to collect this data, particularly as local authorities hold the quarry registration details undertaken under Section 261 previously. The regional assemblies noted that the EPA had relevant data available.

The regional assemblies were asked to consider whether there should be an enhanced role in the future for regional assemblies and the RSES with regards to the extractive industry and quarries.

All three indicated that they have no statutory obligation in relation to extractive industries and would have limited scope to play significant roles in areas outside of their statutory obligations.

They considered that any enhanced role for regional assemblies in the context of quarries and the extractive industry would need to be provided for in legislation and would have implications for staffing and resources.

They stated that it may be the case that the RSES could be utilised as a vehicle to set out the requirement for all local authorities to formulate a coherent quarry/extractive industry policy, however it is unclear if such an approach is supported currently in legislation (existing or forthcoming).

They also indicated that a survey of operational quarries across the country would enable assessment of where there are significant geographical gaps, and where security of aggregate supply is likely to be of concern.



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# 4.0 Development Plan Policy Review

## 4.1 General Extractive Industry Policy Review

As part of this case study paper, extractive industry policy and objectives were reviewed in all of the city/county development plans reviewed for this case study paper. This review facilitated a comparison of the approaches adopted by different planning authorities and helped to identify good practice for regulating, approving and monitoring quarries.

Examples of general development plan policy relating to the extractive industry are included hereunder and these are taken from the Cork County, Donegal and Westmeath development plans:

### Cork County Development Plan 2022-2028

The Cork County Development Plan 2022-2028 (Chapter 8.17 – Mineral Extraction) refers to the ICF report entitled ‘Essential Aggregates: Providing for Ireland’s Needs to 2040’, mentioned in Section 1.1 of this case study paper. It states that this report is “*an industry led call for Government to ensure that Ireland’s future supply of aggregates (crushed rock, sand and gravel) is planned, monitored and managed in a sustainable manner, to provide for Ireland’s future infrastructure development. The document calls for a National Planning Policy for Aggregates which would underpin local and regional planning policy. The Planning Authority recognises the essential role of aggregates and the need for the preparation of a County Minerals Strategy which will support a sustainable extractive industry during the lifetime of the County Development Plan.*”

Objective EC:8-16 is specifically for the purpose of safeguarding mineral reserves and provides for protection and safeguarding of “*the county’s mineral resources from inappropriate development, by seeking to prevent incompatible land uses from being located in the vicinity of the resource, since the extraction of minerals and aggregates is resource based.*” This objective also provides for the preparation of “*a Minerals Strategy Plan to support a sustainable extractive industry during the lifetime of the plan.*” It states that this strategy plan should be “*prepared taking account of environmental, nature, conservation, heritage, landscape, and other planning considerations.*”

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### County Donegal Development Plan 2024-2030

The County Donegal Development Plan 2024-2030 (Chapter 9.2 – Extractive Industry and Geology) states that there are in the region of 170 identified quarries in Donegal. It notes that a report on **The Geological Heritage of Donegal** was published in 2020, as an action of the County Donegal Heritage Plan, and the report is an audit of Geological Sites in County Donegal.

Objective EX-O-1 refers to the intention *“to facilitate extractive industries, subject to the protection of residential and natural amenities and the safeguarding of aquifers and groundwater.”* Policy EX-P-1 confirms that *“new extractive industries shall generally be accepted”* except in areas designated as Especially High Scenic Amenity, Natura 2000 sites, Natural Heritage Areas, Nature Reserves or areas of significant archaeological potential. Policy EX-P-2 notes that it is Council policy *“to only support development proposals for extractive industry developments where such proposals identify relevant robust and effective mitigation measures in respect of the anticipated environmental impacts.”* Policy G-P-1 confirms that *“it is a policy of the Council to protect County Geological Sites”* and *“where significant harm is deemed likely, planning permission will not be granted unless there are overriding considerations of public importance to the County.”*

### Westmeath County Development Plan 2021-2027

The Westmeath County Development Plan 2021-2027 contains development management standards policy objectives relating to the extractive industry. These objectives detail the information that should be submitted with planning applications for quarries and financial bonds and special contribution levies that may be required from developers.

Policy Objective CPO 16.55 stipulates inter alia that *“limited duration on permissions may be provided to allow for the re-evaluation of the development in light of unforeseen environmental implications and changes in environmental standards and technology.”* This is considered good practice to allow for changes in legislation and environmental standards. Reference is also made in CPO16.55 to the requirement for justification of the need for the proposed development, the extent of existing authorised quarry supplies available and the impact of the development on the local environment.

Policy Objective CPO 16.56 requires the developer to lodge a financial bond to ensure the satisfactory reinstatement of the site following the completion of extraction and CPO 16.57 notes that a special contribution levy may be required from the developer towards the cost of upgrading or repairing local roads serving the quarry and to minimise the impact of the quarry operations on the road network.



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## 4.2 Development Plan Policy Review

For the purposes of this case study paper, the findings from the review of development plans are outlined below. They give an overview of the range of policies, objectives and issues covered in relation to quarries and the extractive industry.

These findings have been grouped under the following six themes:

1. Safeguarding and Identifying Unique Resources
2. Effective Use of GSI Surveys and Mapping
3. Integrating Mapping with Policy
4. Identifying Local Factors
5. Protection of the Environment and Eskers
6. Landscape Character Areas and Nationally Unique Landscapes

## Theme 1 - Safeguarding and Identifying Unique Resources

As the geographical location of quarries is fixed and aggregates are a finite resource, the sustainable management and proper safeguarding of these finite resources is essential. All of the development plans that were reviewed for this case study paper contain written policies to safeguard aggregate resources within their functional areas.

Table 9 below summarises some examples of policies in development plans that seek to identify and safeguard aggregate resources.





**Table 9 - Summary of Policies from Selection of Development Plans Relating to the Identification and Safeguarding of Aggregate Resources.**

Planning Authority	Development Plan Policy
<b>Carlow</b>	The Carlow County Development Plan 2022-2028 (Chapter 14.16.2) refers to a unique Lime Quarry located at Clogrennane which has been in operation since 1816 and <i>“the valuable natural resource available at this location which is a key high-quality raw material for the lime products manufactured on site”</i> . The development plan acknowledges that <i>“Clogrennane Lime Limited operates an advanced processing facility, producing a wide range of specialised lime products for the agricultural, construction, environmental and industrial sectors”</i> and is <i>“Ireland’s only producer of quicklime and hydrated lime products and is considered to be of Strategic National Importance.”</i>
<b>Galway County</b>	<p>The Galway County Development Plan 2022-2028 (Chapter 4.14) states that <i>“the geology of the County produces aggregate resources in terms of sand, limestone and gravel, which are currently exploited at quarries throughout the County and the Council recognises this resource as a significant economic asset.”</i> The development plan confirms the Council’s preference for the continued sustainable extraction of existing quarries over the development of new greenfield sites.</p> <p>Policy Objective MEQ1 which deals with aggregate resources refers to ensuring <i>“adequate supplies of aggregate resources to meet future growth needs within County Galway”</i> and ensuring <i>“that this exploitation of resources does not adversely affect the environment or adjoining existing land uses.”</i></p>
<b>Cavan</b>	<p>The Cavan County Development Plan 2022-2028 (Chapter 12.12) states that <i>“Cavan County Council will ensure that all natural resources are exploited in an environmentally sound and sustainable manner.”</i></p> <p>A number of Quarrying Development Objectives are included in this chapter for the purpose of safeguarding locations for future mineral extraction of major mineral deposits in the county and to facilitate adequate supplies of aggregate resources to meet the future growth needs of the county and the wider region.</p> <p>Note: Reference is also made in Chapter 11.1 of the development plan to the historic Latt quarry which was located close to Cavan town which provided pale sandstone evident in buildings such as Cavan Courthouse. It is noted that Latt quarry is no longer operational.</p>
<b>Fingal</b>	<p>The Fingal County Development Plan 2023-2029 (Chapter 7.5.3.4) refers to the fact that <i>“the Council will seek to ensure that significant aggregate resources in the County are appropriately protected.”</i></p> <p>Policy Objective EEP27 refers to the need to <i>“protect and safeguard the County’s natural aggregate resources from inappropriate development and support the sustainable extraction of aggregate resources at suitable locations within the County subject to appropriate environmental safeguards”</i>.</p> <p>Note: In line with best practice, extractive industry proposals in Fingal are advised to have regard to Section 261 and Section 261A of the 2000 Act, the Ministerial Guidelines for Planning Authorities on Quarries and Ancillary Activities (2004) and a range of other guidelines (see Chapter 14.15.6).</p>
<b>Meath</b>	<p>The Meath County Development Plan 2021-2027 (Chapter 9.11) acknowledges that the county <i>“contains a variety of natural resources such as building raw materials in the form of sand, gravel, stone reserves, including high purity limestone and shale used in cement and magnesia manufacture and base metal deposits.”</i></p> <p>The development plan aims <i>“to facilitate adequate supplies of aggregate resources, to meet the future growth needs of the County and the wider region while addressing key environmental, traffic and social impacts and details of rehabilitation.”</i></p>
<b>Laois</b>	The policy objectives for Rural Development in the Laois County Development Plan 2021-2027 (Chapter 9.6) and Policy Objective RL14 <i>“support in principle the expansion of the aggregates and concrete products industry”</i> subject to environmental, traffic and planning considerations.

## Theme 2 - Effective Use of GSI Surveys and Mapping

The majority of development plans, reviewed for this case study paper, refer to the general location of aggregate resources within their area. However, not all illustrate their exact location through mapping.

### Galway County

The Galway County Development Plan 2022-2028 (Chapter 4.14) notes that *“there will be a link provided on the Galway County Council website for the ePlanning and iPlan system for the mapped quarries”*.

### Offaly

Table 4.11 of the Offaly County Development Plan 2021-2027 contains a *“Schedule of County Geological Sites identified by the Irish Geological Heritage Programme for Protection in County Offaly in 2016”*. In the context of this case study paper, Camcor Forest Quarry, is of note since it is identified as a County Geological Site.

### Leitrim

The Leitrim County Development Plan 2023-2029 (Chapter 10.7) states that *“the wide distribution of resources is recognised and known deposits and sites were mapped by The Geological Survey of Ireland (GSI) in 2004 and updated in 2014. The GSI Aggregate Potential Mapping illustrates potential crushed rock and sand and gravel deposits and assesses the interactions between the development of these resources and certain land uses such as boreholes and events such as landslides.”*

### Meath

The Meath County Development Plan 2021-2027 (Chapter 9.11) notes that *“the wide distribution of resources is recognised and particular known deposits and sites have been mapped by Geological Survey of Ireland (GSI) in 2004. The GSI Aggregate Potential Mapping illustrates potential crushed rock and sand and gravel deposits and assesses the interactions between the development of these resources and future land uses.”* It is noted in the development plan that *“these maps are acknowledged as not being exhaustive and additional reserves may adjoin those shown.”*

### Best Practice Maps

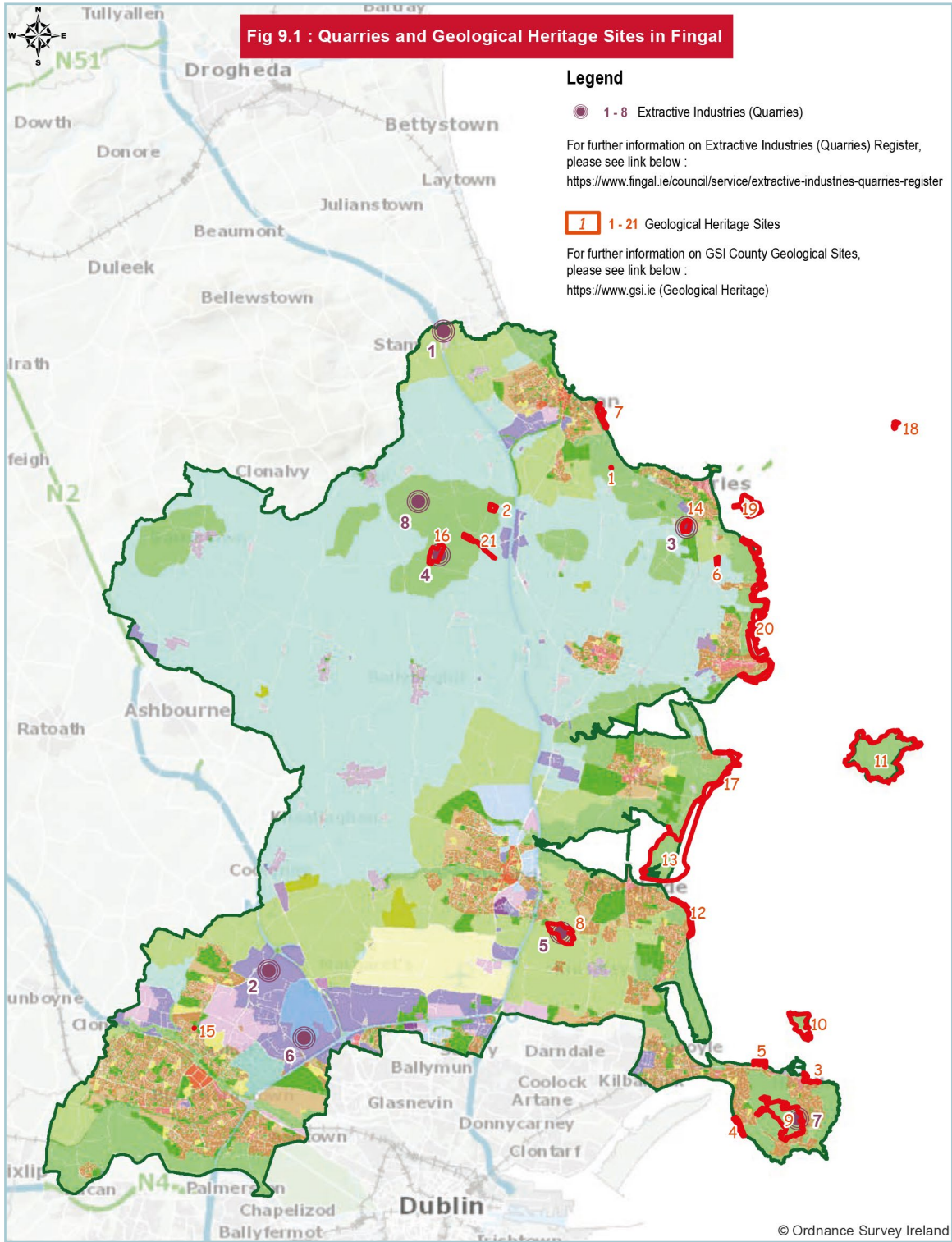
Fingal, Laois, Kerry and Louth County Development Plans contain good quality maps which demonstrate quarrying sites and aggregate potential. Extracts from these plans are featured as case studies below.



Case Study - Fingal

The Fingal Development Plan 2023-2029 contains the map below which illustrates the location of 21 County Geological Sites identified by the GSI as well as the location of sites (8) included on the Fingal Extractive Industries (Quarries) Register, which was compiled in accordance with the requirements of Section 261 and 261A of the 2000 Act.

Map 2 - Quarries and Geological Heritage Sites in Fingal.



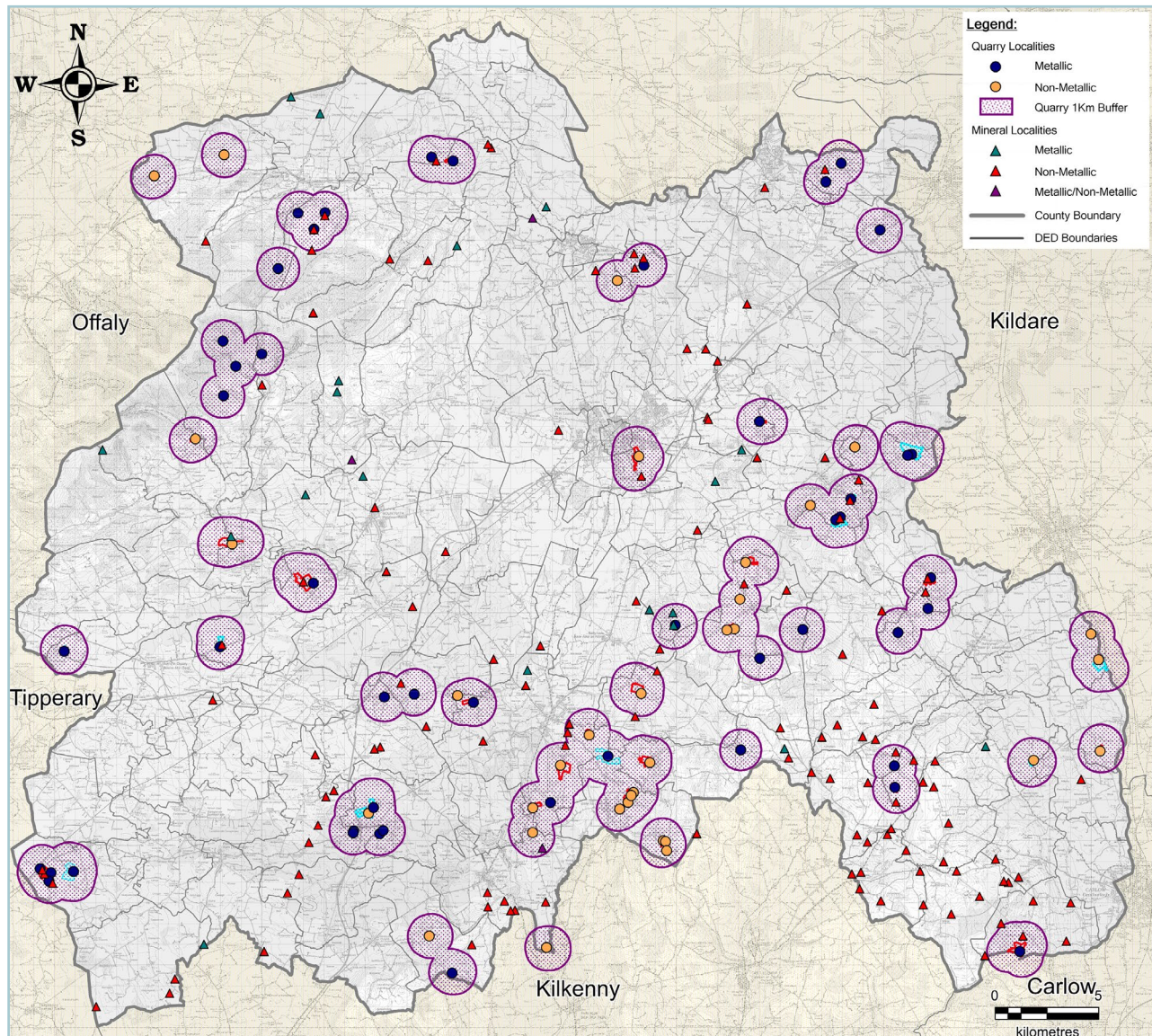
Source: Fingal Development Plan 2023-2029.



## Case Study - Laois

The Laois County Development Plan 2021-2027 contains the following map (Map 3) entitled 'Quarrying Sites in County Laois' which indicates quarry and mineral locations and which also highlights a 1km buffer around each quarry.

**Map 3 - Quarrying Sites in County Laois.**



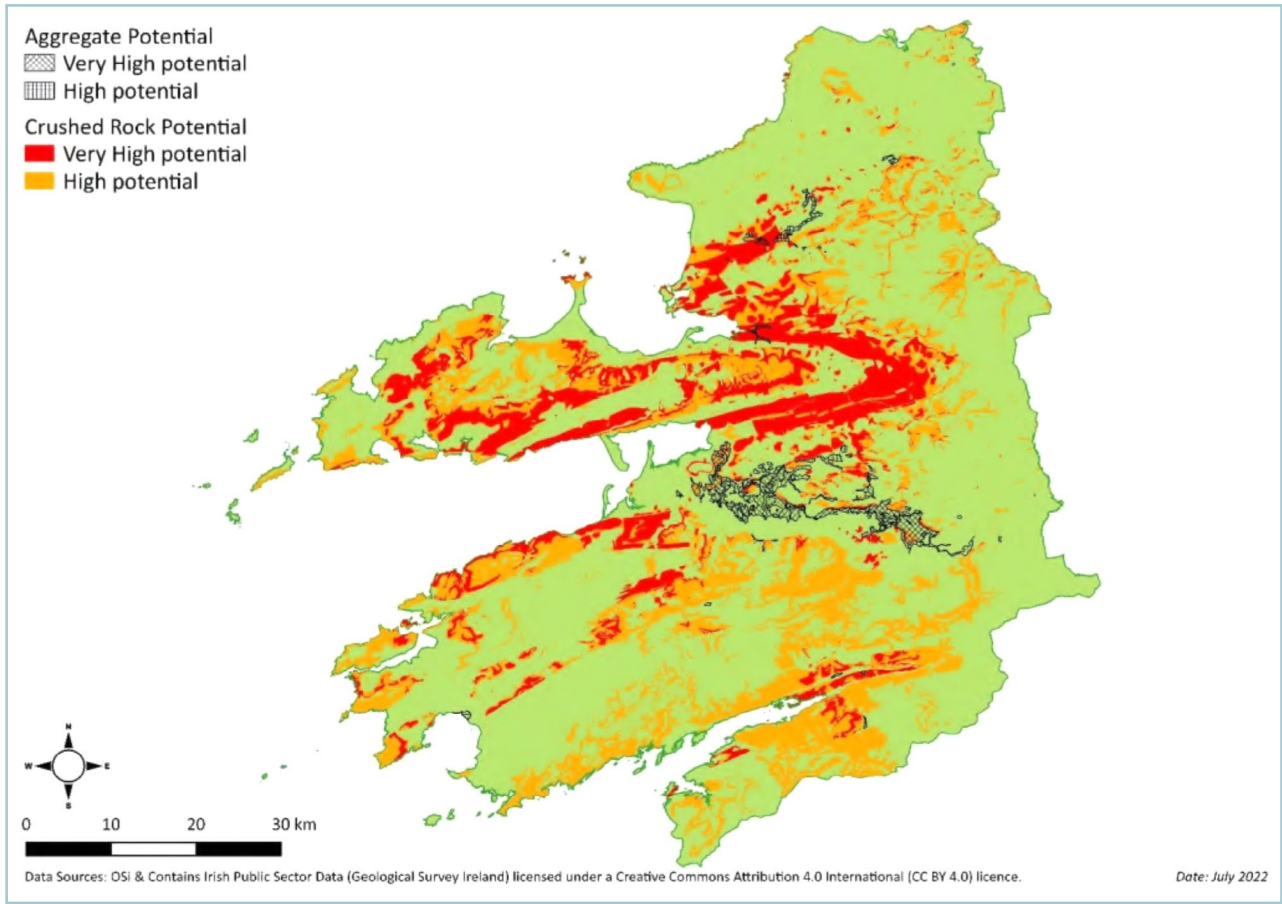
**Source:** Laois County Development Plan 2021-2027.



Case Study - Kerry

The Kerry County Development Plan 2022-2028 contains the following map which illustrates the Mineral and Aggregate Potential in County Kerry.

Map 4 - Mineral and Aggregate Potential in County Kerry.



**Source:** Kerry County Development Plan 2022-2028.

## Case Study - Louth

The Louth County Development Plan 2021-2027 states that the county contains a variety of natural resources *“in the form of sand, gravel and stone reserves, with substantial building sand reserves in the Cooley area.”* It further notes that the GSI’s *“Aggregate Potential Mapping illustrates potential crushed rock and sand and gravel deposits. The areas of high to very high potential for crushed rock deposits are generally focused on the Cooley peninsula, however, an area from Collon to Clogherhead is also identified as having high potential.”*

Policy objectives within the Louth County Development Plan support the designation of qualifying sites of geological interest listed in Table 8.4 as Natural Heritage Areas (NBG 16), promote awareness of areas of geological interest (NBG 18) and *“in consultation with*

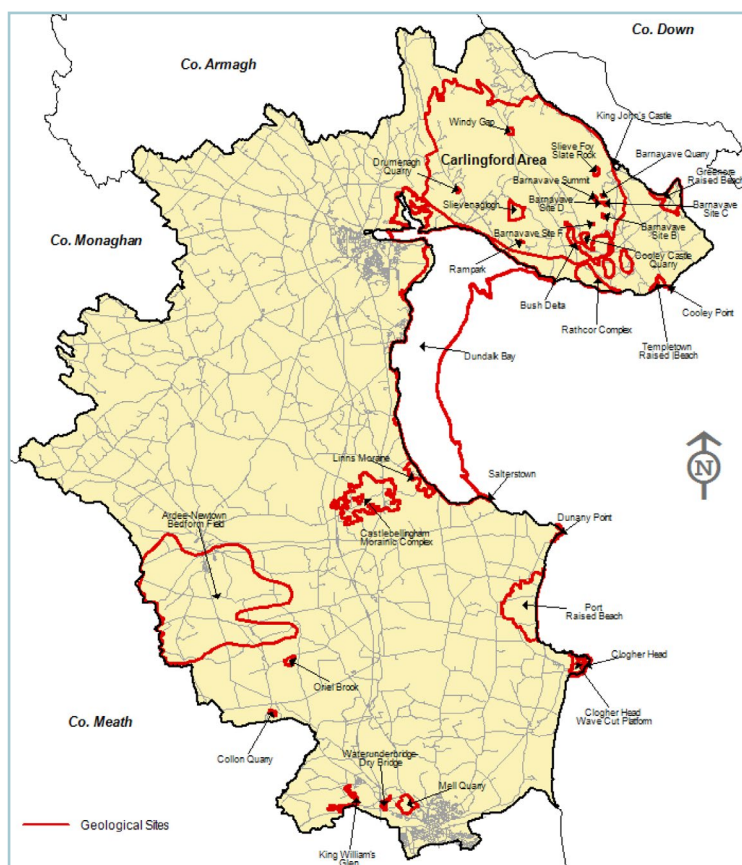
*the Geological Survey of Ireland, protect from inappropriate development and maintain the character, integrity and conservation value of those features or areas of geological interest listed in Table 8.4 of the Plan”, (NBG 17).*

The development plan also echoes the requirements of the 2001 Regulations and highlights in its policies that applications for quarries will be referred to the GSI, as can be seen in ENV 47:

*“To refer any application for development to the Geological Survey of Ireland, where it relates to mineral extraction, quarrying developments/extensions and any development involving excavations greater than 50,000m<sup>3</sup> in volume or one hectare in area.”*

The map below from the Louth County Development Plan illustrates the location of ‘Sites of Geological Interest’ within the county.

**Map 5 - Sites of Geological Interest in County Louth.**



**Source:** Louth County Development Plan 2021-2027.

### Theme 3 - Integrating Mapping with Policy

To ensure alignment with best practice, extractive industry objectives and policies should be informed by and utilise the data and mapping available from the GSI and the integration of maps with policy is described below.

#### Carlow

The Carlow County Development Plan 2022-2028 (Chapter 14.16) states that *“the county has a rich base of aggregate and limestone reserves which are of strategic importance to the local and regional economy and a valuable source of employment in rural parts of the county. The Geological Survey of Ireland Aggregate Potential Mapping (APM) shows the potential for crushed rocks and for sand and gravel deposits. It also shows the inventory of active and historical quarries and pits, as known in 2014.”*

**Table 10 - Land Use Capacity Matrix for County Carlow.**

Land Use Type	Mount Leinster - Blackstairs	Central Lowlands	River Slaney - East Rolling Farmland	Killeshin Hills
Agriculture	Low	High	High	High
Rural housing	Low	Moderate	Low	Low
Urban development/ expansion	Low	Moderate	Moderate	Low
Forestry Plantation	Moderate	Moderate	Moderate	Moderate
Tourism related activity	High	High	High	High
Industrial development	Low	Low	Low	Low
Extractive industry	Low	Moderate	Moderate	Moderate
Wind farming	Low	Moderate	Moderate	Moderate

**Source:** Carlow County Development Plan 2022-2028.

It is noted in the development plan that *“local supplies of aggregates for development within the county are vital in the drive to reduce”* their *“carbon footprint and to transition towards a more sustainable society.”*

Objective EI O2 notes the requirement to *“consult with the Geological Survey of Ireland (GSI) with regard to any developments likely to have an impact on Sites of Geological Importance listed in Chapter 10”* of the development plan.

The development plan (Chapter 9) also contains a land use capacity matrix shown below. The development plan provides that land use policy and development management will have regard to the capacity of the landscape to absorb different types of land use, as indicated in the land use capacity matrix below.

## Limerick

The Limerick City and County Development Plan 2022-2028 states that “the Minerals Map shows the location of mineral deposits in Limerick” and that “further details of minerals and aggregates can be found on the Geological Survey of Ireland website, <https://www.gsi.ie>.”

Chapter 12 of the development plan sets out the Land Use Zoning Strategy and contains a Land Use Zoning Matrix which clarifies where quarries are generally permitted, not permitted or open for consideration. An extract from the matrix is included in Table 11 below.

**Table 11** - Extract from the Limerick City and County Development Plan 2022-2028 Land Use Zoning Strategy.

Land Use Zone	City Centre	Town Centre	District Centre	Local/Neighbourhood Centre	Existing Residential	New Residential	Educ & Community Infra.	University	Mixed Use	High Tech	Enterprise & Employment	Industry	Retail Warehousing	Sports Arena	Open Space	Semi Natural OS /Groody Valley /Space	Special Control Areas	Utilities	Agriculture
Type of Use																			
<b>Extractive Industry/Quarry</b>	X	X	X	X	X	X	X	X	X	X	X	/	X	X	X	X	X	X	O
Generally Permitted = /																			
Open for Consideration = O																			
Generally Not Permitted = X																			

**Source:** Limerick City and County Development Plan 2022-2028, Land Use Zoning Strategy.



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## Theme 4 - Identifying Local Factors

In development plans, the development objectives relating to quarries should identify local factors relating to environmental issues, mitigation and management. The following examples indicate where development plans had specific policy catering to the individual needs in their local areas.

### Strategic Infrastructure

In keeping with good practice, the consideration and protection of strategic infrastructure, is given specific policy support within the Meath County Development Plan 2021-2027 as follows:

*“INF POL 53: To ensure that development proposals, including quarrying and mining operations involving explosives, do not negatively impact on the gas network. The Council shall refer applications for developments in proximity to the natural gas network to Gas Networks Ireland and will have regard to their comments in the assessment of the application.”*

### Coastal Policies and Foreshore Extraction

As Fingal is a coastal county a specific policy was included in the Fingal County Development Plan 2023-2029 to cater for this. Objective EE075 prohibits *“mineral extraction and land reclamation along the coast, particularly in proximity to estuaries, except in exceptional circumstances”*. In addition, Objective EE076 prohibits *“the removal of beach material, aggregates, sand and gravel, including the removal of material from sand dune ecosystems.”*

In relation to foreshore extraction, the Kerry County Development Plan 2022-2028 (Chapter 9.7.6.2.2) states that *“the extraction of material from the foreshore, beaches, sand dunes and watercourses can have serious adverse impacts on the environment. It can alter the ecosystem in an area and in certain instances initiate or contribute to erosion.”* It states that the Council will seek to prohibit such extraction from occurring. Foreshore Extraction Objective KCDP 9-70 aims to:

*“Prevent, where appropriate, the extraction of inorganic material from the foreshore and watercourses. Proposals necessary for the purposes of flood risk management or navigation route protection will be considered on their merits and will be subject to detailed environmental assessment. As part of this the potential for impact on fisheries and Natura 2000 sites will be taken into consideration.”*

### Geology

The Offaly County Development Plan 2021-2027 (Chapter 4.16) outlines policy in relation to geology, eskers and quarries and the need *“to protect from inappropriate development and maintain the character, integrity and conservation value of features or areas of geological interest as contained in the scheduled list of geological heritage sites identified in Table 4.11 Offaly Geological Sites”* (BLP-09). Policy objective BLP-10 also aims to encourage access to geological features in the county. While policy objective BLP-13 recognises *“the natural heritage value of disused quarries as rich habitats and to encourage landowners to preserve quarries post extraction as habitats”*.

The development plan also contains Rural Economic Development Policies (Chapter 5.11) such as REDP-03 which aims *“to continue to protect existing resource-based industry from encroachment by residential development, for example mining, quarrying, gravel pits, and intensive agriculture.”*

It is noted that Offaly County Council favours the use of existing licensed quarries over proposals for extraction from greenfield sites and has presumption against new quarry developments on the county's eskers (Chapter 13.9.14, DMS-112).

### Rights of Way

The Laois County Development Plan 2021-2027 contains a bespoke policy objective which refers to existing public rights of way and walking routes in the context of planning applications for new development for aggregate extraction and processing.

*“DM RL 3 Mining and Aggregates Development Control Standard*

*Applications for new development for aggregate extraction, processing and associated processes, shall:*

- 1) *identify existing public rights of way and walking routes which may be impacted on or are adjacent to the development site. They shall be kept free from development as a Rights of Way/Walking Route.”* (Note this objective contains other elements. For full details please refer to the Laois County Development Plan 2021-2027).



### Water Framework Directive

The Carlow County Development Plan 2022-2028 (Chapter 6.9.3) notes the “*significant pressures impacting on the 1,460 water bodies that are ‘At Risk’ of not meeting their objectives include agriculture (53%), hydromorphology (24%), urban wastewater (20%), forestry (16%), domestic wastewater (11%), urban runoff (9%), peat (8%), extractive industry (7%) and mines and quarries (6%).*” The following policy is contained in the development plan (Chapter 14.16):

*“EI P8: Ensure compliance with the overall objectives of the Water Framework Directive in the context of quarry development(s) and extractive industry.”*

### Justifying the Need for Quarry Development

The Limerick City and County Development Plan 2022-2028 (Chapter 11.6.10) states that “*in assessing an application for development (whether for a new quarry or an extension to an existing), the need for the development in terms of national importance and the impact of the development on the local economy will be considered, together with*” the “*nature and quantity of aggregate(s) to be extracted, including total and annual tonnage of excavated aggregates*”, along with the “*location - relative to dwellings or other development (within 1km of site), aquifers and groundwater, environmentally sensitive areas, special amenity areas and areas of archaeological potential in particular.*”



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## Theme 5 - Protection of the Environment and Eskers

The Galway County Development Plan 2022-2028 contains a comprehensive suite of policies in relation to the protection of the environment. In particular policy objective MEQ 3 encourages *“the use of quarries and pits for sustainable management of post recovery stage construction and demolition waste, as an alternative to using agricultural land, subject to normal planning and environmental considerations.”* In addition, MEQ 4 which relates to Landscaping Plans aims to *“ensure that all extractions are subjected to landscaping requirements and that worked out quarries are rehabilitated to a use agreed with the Planning Authority”.*

The Meath County Development Plan 2021-2027 contains specific policies in relation to the rehabilitation of quarries to agricultural use and/or other possible recreational uses:

*“DM POL 22: To encourage the rehabilitation of disused pits and quarries to productive agricultural use where appropriate having regard to all appropriate environmental considerations.”*

*“DM OBJ 63: Where possible, sites shall be subject to rehabilitation and landscaping programmes in tandem with the various phases of extraction. Possible uses post closure could include agriculture and recreation/amenities.”*

In the Limerick City and County Development Plan 2022-2028 Objective ECON O39 sets out their considerations and requirements in relation to mineral extraction and environmental impacts:

*“ECON O39 - It is an objective of the Council to:*

- a) Recognise the potential of the extractive, mineral and mining industries to contribute to Limerick’s economy and endeavor to protect access to these resources, where known.*
- b) Minimise environmental and other impacts of mineral extraction through rigorous application of development management and enforcement requirements for quarry and other developments; and*
- c) In particular, to have regard to visual impacts, methods of extraction, noise levels, dust prevention, protection of rivers, lakes and other water sources, impacts on residential and other amenities, impacts on the road network (particularly with regard to making good any damage to roads), road safety, phasing, re-instatement and landscaping of worked sites.*
- d) Ensure that development for aggregates/ mineral extraction does not significantly impact on County Geological Sites / Sites of geological interest.”*

The Limerick City and County Development Plan (Chapter 11.6.10) also states that *“the planning authority will support the extractive and mineral extraction industry by issuing planning permission that extends over the estimated life of the quarry or mine.”* The plan requires that *“the applicant sets out a phasing proposal for the development to assess the timescale of the proposal.”* The planning authority notes that it *“will impose strict conditions on planning permissions relating to the appropriate mitigation measures to control the impacts on the environment and surrounding area. Limited duration on permissions may be issued to allow for re-evaluation of the development in light of unforeseen implications or changes in environmental standards and technology.”*



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In the Offaly County Development Plan 2021-2027 (Chapter 4.6.3) there is recognition that *“Offaly has a number of exhausted or worked out quarries and sand and gravel pits, where activity has ceased. It is now recognised that worked out quarries have potential as rich habitat and nesting sites.”* Offaly County Council *“encourages operators to consult with the Irish Concrete Federation (ICF) and the National Parks and Wildlife Service (NPWS) document “Guidelines for the Protection of Biodiversity within the Extractive Industry” which advises how biodiversity can be catered for from planning applications through to operations and rehabilitation of a quarry.”*

The Leitrim County Development Plan 2023-2029 (Chapter 13.18.2) states that the planning authority will take *“into account the reduced demand for aggregates that will come about through improved recycling of construction and demolition waste”* and *“will not facilitate the development of the extractive industry and permit such workings unless it has been shown that certain criteria can be met”*.

These criteria include: safeguarding the environment and the landscape; having access to a good road network; and a beneficial after use of the land.

Finally, the Laois County Development Plan 2021-2027 contains Policy Objectives for Biodiversity and Designated Sites:

*“BNH 8; Recognise and protect the significant geological value of sites in County Laois and safeguard these sites, in consultation with the Geological Survey of Ireland and in accordance with the National Heritage Plan and “Geological Heritage Guidelines for the Extractive Industry”.*

Some development plans have also included specific policy in relation to the protection of eskers such as the following examples outlined in Table 12 below.

**Table 12 - Examples of Development Plans that Identify Specific Policies for the Protection of Eskers.**

<b>Offaly County Development Plan 2021-2027</b>	<p>BLP-11: It is Council policy to protect and conserve the landscape, natural heritage and biodiversity value of esker systems in the county as identified in the Offaly Esker Study, 2006.</p> <p>BLP-12: It is Council policy to assess the impact of proposals for quarry development on nearby eskers, with reference to their status or relative importance, for example, amenity, landscape and scientific value in the context of the overall esker system.</p>
<b>Laois County Development Plan 2021-2027</b>	<p>The Laois County Development Plan (Chapter 11.11.1) also contains specific policy in relation to eskers, stating that <i>“the Council recognises the unique importance of esker landscape and its archaeological and historic value. All proposals for sand and gravel extraction will be determined by considering the need to conserve the environment and the extent to which proposed developments would be damaging. There is a presumption against new quarry development on eskers. The Council recognises that the exploitation of deposits can have seriously damaging environmental impact on the esker network.”</i></p> <p>Laois Policy Objectives for Eskers:</p> <p>GEO 6: Assess applications for quarrying activity and gravel extraction and other development in proximity to eskers, with respect to their landscape importance or amenity value and the need to conserve them free from inappropriate development and to conserve their environmental character values and the extent to which proposals would damage these qualities.</p>
<b>Galway County Development Plan 2022-2028</b>	<p>ESK 1 Protection of Esker Systems:</p> <p>Protect and conserve the landscape, natural heritage and biodiversity value of esker systems in the county. Assess applications for quarrying and other proposed developments with reference to their status or relative importance, for example, amenity, landscape and scientific value in the context of the overall esker system.</p>



## Theme 6 - Landscape Character Areas and Nationally Unique Landscapes

The majority of the development plans that were reviewed for this case study paper indicate that quarries will not be permissible unless it can be demonstrated that they would not have significant adverse impacts on the environment.

The Galway County Development Plan 2022-2028 for example states that *“the development of new quarries will be strictly controlled in areas of high landscape value, in areas of significant archaeological potential, on European Sites, Natural Heritage Areas (NHAs), Nature Reserves or other areas of importance for the conservation of flora and fauna and development shall also have regard to the requirements of the EU guidance document Undertaking Non-Energy Extractive Activities in Accordance with Natura 2000 Requirements.”*

In the Meath County Development Plan 2021-2027 a number of specific policies in relation to rehabilitation of quarry lands and areas of significant landscape value are provided including:

*“RD POL 26: To ensure that all existing workings shall be rehabilitated to suitable land uses and that all future extraction activities will allow for the rehabilitation of pits and proper land use management. The biodiversity value of the site should be considered in the first instance when preparing restoration plans. Where landfilling is proposed, inert material is the preferred method. Each planning application shall be considered on a case by case basis and where relevant will be dealt with under the relevant regional Waste Management Plan.*

*RD POL 27: To ensure that development for aggregates/mineral extraction, processing and associated processes does not significantly impact on the following areas:*

- i. Existing & Proposed Special Areas of Conservation (SACs);*
- ii. Special Protection Areas (SPAs);*
- iii. Natural Heritage Areas and Proposed Natural Heritage Areas;*
- iv. Other areas of importance for the conservation of flora and fauna;*
- v. Areas of significant archaeological potential;*
- vi. In the vicinity of a recorded monument, and; sensitive landscapes*
- vii. World Heritage Sites”*

In the Louth County Development Plan 2021-2027, the Landscape Character Areas are identified in Chapter 8, and provided in the map below. The plan includes a suite of policies to ensure the preservation of the uniqueness of landscape character types and seeks to co-operate with adjoining local authorities, both north and south of the border to ensure that the environment is maintained in a sustainable manner.



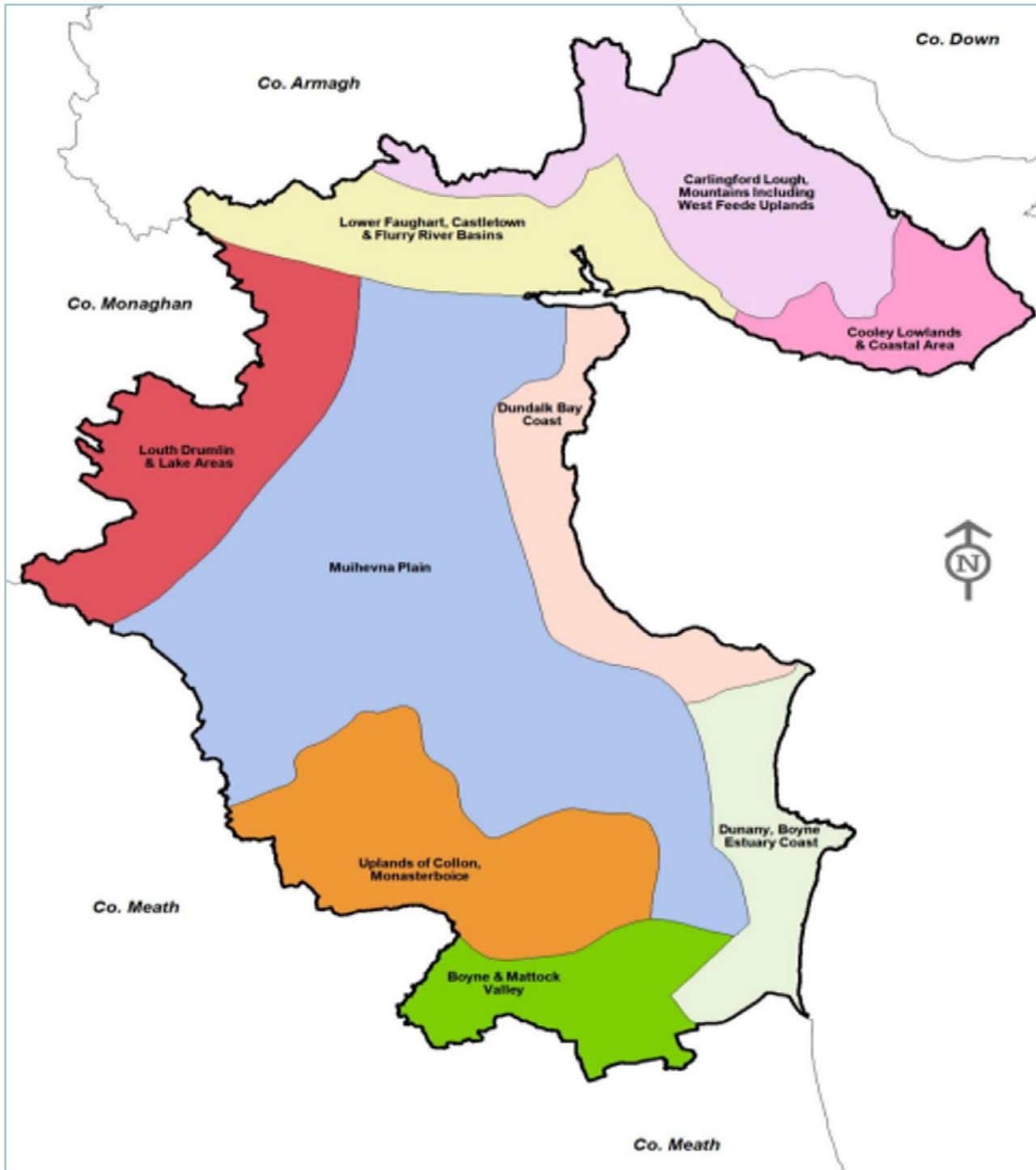
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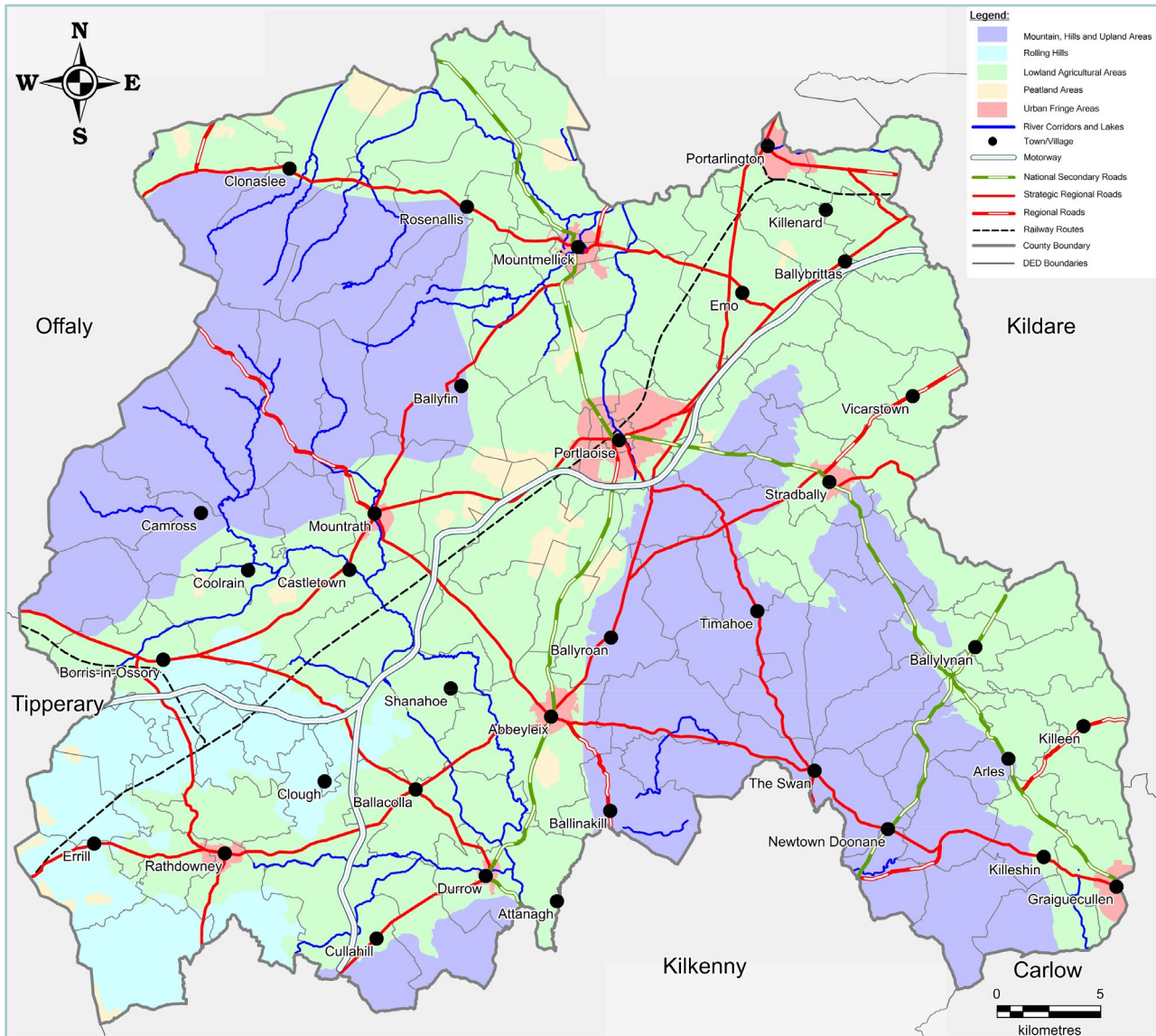
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**Map 6** - County Louth Landscape Character Areas.

**Source:** Louth County Development Plan 2021-2027.

Map 7 below, taken from the Laois County Development Plan 2021-2027, details the Landscape Character Assessment. The development plan also contains a suite of associated policies to protect the landscape when considering development proposals. Further details can be found [here](#).

**Map 7 - Laois Landscape Character Assessment.**



**Source:** Laois County Development Plan 2021-2027.

# 5.0 Key Findings and Conclusions

## 5.1 Key Findings

From the research undertaken for this case study paper it is clear that while the majority of development plans reference the Ministerial Guidelines for Planning Authorities on Quarries and Ancillary Activities (2004) and recognise the importance of extractive industries from a number of perspectives, varying approaches are being used to the implementation of the guidelines. Since the guidelines were published in 2004, changes in planning and environmental policies and expected growth in construction demand suggest a need for a more strategic approach to the extractive industry sector and development plan policies. This could be achieved through an update of or revision to the guidelines, which would ultimately take the form of a new National Planning Statement provided for under the 2024 Act.

Building on existing development plan policies the approach suggested above would add strategic direction in identifying construction material requirements on a construction market basis. This approach would also be able to factor in the potential for construction and demolition material re-use and the wider circular economy. One of the benefits of a more strategic and coordinated approach would be the avoidance of any supply chain shortages, e.g. shortages in the availability of sand within the Dublin area which in turn can drive longer-distance haulage, increasing both carbon footprint and construction material costs.

Furthermore, a national system for predicting supply and demand using geoscience data could help manage resources sustainably and support long term planning. The system could work from a national register of extraction sites. Using the input from all relevant stakeholders this would ensure an up-to-date and accurate mechanism for the sector to underpin a more strategic plan-led approach, with a focus on the circular economy.

Similar approaches have been implemented in the spatial planning system in Ireland in the housing area and are planned in the near term for renewable energy. These are being prioritised in order to give the planning system better strategic direction and avoid challenges in supply in the near to medium term and a similar approach could benefit the extractive industry.

### **The Ministerial Guidelines for Planning Authorities on Quarries and Ancillary Activities (2004)**

Notwithstanding that the guidelines are now over twenty years' old, they remain substantially robust in terms of supporting planning authorities in the performance of their functions. The research for this case study paper found that the guidelines are a key point of reference for the majority of development plans across the country.

Feedback from local authorities and regional assemblies suggest that updated quarry guidelines should have greater consideration of public participation and community engagement, environmental assessments (AA and EIA) and legislative changes.



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## National and Regional Policy

The requirements of the 2000 Act, together with the Ministerial Guidelines for Planning Authorities on Quarries and Ancillary Activities (2004), have set a clear context for local authorities in addressing quarries in their statutory development plans. Many of the development plans, reviewed as part of this research, contained detailed extractive industry policies and objectives reflecting the provisions of the Ministerial Guidelines for Planning Authorities on Quarries and Ancillary Activities (2004). In contrast, the strategic policy context, as set out in the NPF and RSEs, has been less instructive for local authorities, as metric targets or indicators are not provided for translation into local policy, or to enable local level monitoring, unlike in other policy sectors such as housing, employment and energy.

Given the regional impact of quarries there is an opportunity to strengthen policy within the three RSEs during their review process in 2025 and promote a more regional approach for quarries and the extractive industry.

Furthermore, with the increasing emphasis on climate change, stronger policies are needed for recycling aggregates and promoting a circular economy to support the decarbonisation of the extractive industry sector.

The stable supply of aggregates, which are a finite resource, to supply the construction industry in Ireland in the future is critical. Likewise, future development plans and local level plans will need to reflect this through more precise evidence based policies that can be readily monitored. This is particularly important for those development plans and local plans that contain strategic projects, such as the MetroLink.

A National Planning Statement that addresses inter alia marine aggregates may also be beneficial, having regard to the sensitive nature of marine environments, for example, the Dublin Bay Biosphere.

Finally, the review of the rural housing guidelines, which was also referred to by local authorities as a priority, would allow for the consideration of the location of reserves and existing quarries. Local authorities stated that there is often conflict between the residential amenity of rural one-off housing and the day to day operation of quarries.

## Future Considerations

While the research undertaken confirmed that much of the policy guidance in the current quarry guidelines remains valid, there are specific matters that updated statutory guidance could address to take account of the evolution of the wider policy and regulatory context. These include, but are not limited to, consideration of the following:

1. Regional assemblies could play a role in coordinating regional assessments of aggregate requirements working in tandem with the State's geoscience expertise. This would enable local authorities to make clear provisions in their development plans to meet the identified requirements. This would be subject to the necessary technical support and resources being put in place.
2. Updating relevant provisions with regard to both Environmental Impact Assessment (EIA) and Appropriate Assessment (AA) and other environmental requirements, including the issue of abandonment, the circular economy and climate action, in light of extensive policy changes and case law.
3. Addressing marine planning for dredged aggregates and other issues, in the context of the expanded remit of local authorities and An Bord Pleanála.



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4. Enhancing advice on reinstatement and future use of extracted areas taking into account local considerations including biodiversity.

## Enforcement

The public expects a strong commitment to the proper enforcement of extractive industry activities and upholding best practice in environmental standards. Nonetheless, the complexities of the registration system, and in particular the Section 261A process, have created significant and ongoing challenges for the local authority planning enforcement system. These challenges are complex, time-consuming and resource intensive to resolve.

The registration process (Section 261 and Section 261A) started the work of building a strong baseline database on quarries across the country which has been confirmed through the reviews of local authorities undertaken by the OPR under Section 31AS of the 2000 Act. The work of the local authorities in managing the quarry registration process has to be acknowledged, including that a small number of complex cases are still live.

It was evident from the responses received, from the selected 11 planning authorities that completed the quarry questionnaire, that quarry developments continue to generate significant levels of enforcement complaints requiring detailed, painstaking investigation and evidence gathering. For example, one planning authority reported that it has 58 live unauthorised development cases on illegal quarry activities or breaches of planning conditions, which it notes is an unsustainable workload.

In this context, early commencement and implementation of Section 356 of the 2024 Act could allow for the establishment of designated regional enforcement authorities to provide greater support for such complex cases.

This could be implemented along with specific technical training scoped out through the OPR and the Local Authority Planning Services Training Group, as discussed further below.

## Monitoring Quarries – Extractive Industry Register and Mapping

The research found that there is scope for improved use and integration of GSI datasets, mapping and new technologies. From the planning authorities surveyed it was found that there was no standard approach to the type of technology used to map (and monitor) quarries. This finding echoed the high level findings, from the analysis of the 29 development plans, where a standard approach to the use of datasets and technologies was not evident.

From the research it was found that there are good examples where local authorities collaborated with the GSI on the preparation of geological heritage surveys. There are further opportunities to integrate these surveys into policy formulation.

The research also found varying degrees of incorporation of the Section 261 quarry registers into development plans. It was of concern that the majority of development plans do not clearly list in tabular form the number of quarries in their functional areas nor do they include a map indicating the location and/or status of quarries in their area. Notwithstanding this, as outlined in this case study paper there were also good examples in development plans regarding the effective use of mapping datasets, particularly from the GSI, which were used and communicated in the development plans.

One of the most notable observations of this research is an uneven alignment between various datasets held by local authorities in their various planning and environmental protection roles, as indicated by Section 261 and waste management registers.

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The research found in some cases where local authority quarry register figures matched the EPA Extractive Industry Register figures, the registers were often listing different quarries. This points to a clear need for a single nationally maintained register of quarries to ensure consistency. To ensure its effectiveness this would require regular updates and quality checks by either the EPA or the GSI.

More regular updates to the national register showing the number of active quarries within each county would be beneficial. This should cross-reference to accurate and up-to-date mapping for every extraction site. Feedback from the surveys highlighted the opportunity for regional collaboration and the use of remote sensing and aerial surveillance technology (drones etc.) would be considered useful.

### Training and Resources

Dealing with complex and evolving legislation has been a key feature of the feedback received from planning authorities.

Regular training of local authority and regional assembly staff to adequately manage quarries in Ireland is necessary, including topics such as GIS, drones and planning enforcement. This area is now being addressed in the context of the work of the Planning Services Training Group and the implementation of the Local Authority Planning Sector Learning and Development Strategy.

## 5.2 Research Conclusions

Drawing on the lessons, observations and key findings of this research a number of conclusions have emerged. These conclusions relate not only to development plans and the role of planning authorities in development management and enforcement, but highlight the significance of the wider national and regional policy context that development plans operate within. The conclusions also highlight the unique opportunities that exist at this point in time with the emerging changes to the planning system and other tandem policy areas.

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### 1. Revision of the Ministerial Guidelines for Planning Authorities on Quarries and Ancillary Activities (2004)

Given the significant evolution of planning and environmental policy and legislation since the publication of the Ministerial Guidelines for Planning Authorities on Quarries and Ancillary Activities (2004), an updated and revised version is required. The revised guidelines should align with the new National Planning Statement approach under the 2024 Act.

Key areas for inclusion are:

- > Enhanced focus on Appropriate Assessment (AA) and Environmental Impact Assessment (EIA).
- > Promotion of circular economy principles, particularly the recycling of aggregates.
- > Greater emphasis on climate action.
- > Strengthened provisions for public participation and community engagement.
- > Further advice on the reinstatement and/or future use of quarry sites post-extraction, having regard to local biodiversity.

## 2. Consideration of the Location of Aggregate Reserves/Existing Quarries in the Review of the Rural Housing Guidelines

The review of the rural housing guidelines offers an opportunity to address the relationship between quarry locations and residential development. Further guidance could assist in avoiding conflict between the location of quarries and rural housing and ensuring co-existence of these land uses.

## 3. Establishment of a National Register of Extractive Industries in Ireland

A single, regularly updated national quarry register is a key area of improvement.

This register could:

- > Be subject to national level quality checks by the EPA and/or the GSI.
- > Integrate accurate mapping of each site ensuring up-to-date spatial data is readily available.

## 4. Development of a National Prediction System for Aggregate Supply and Demand

The establishment of a State-operated prediction system would provide a strategic tool for assessing aggregate supply and demand. Leveraging geoscience expertise, this system could ensure resource availability in line with construction needs.

## 5. Develop a National Policy Statement on Marine Aggregates

A National Policy Statement on marine aggregates could:

- > Address the sustainable management of marine aggregates.
- > Ensure co-ordination and collaborative mapping between marine planning (marine aggregates) and renewable energy projects.

## 6. Enhanced Role for Regional Assemblies in the Extractive Industry

Regional assemblies could provide a more active role in the co-ordination of aggregate resources and requirements.

This could involve:

- > Including extractive industry policies within each RSES, which then feeds into each development plan.
- > Collaboration with geoscience expertise to ensure regional consistency.

## 7. Implementation of Section 356 of the 2024 Act to Establish Designated Regional Enforcement Authorities

The implementation of Section 356 would enable the establishment of regional enforcement authorities. These could provide greater support for complex enforcement cases.



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## 8. Inclusion of Quarry Data in Development Plans

Development plans could include detailed data on quarries presented as:

- > A table indicating the number, location and status of each quarry within the county.
- > Accurate quarry maps clearly showing their boundaries and extent, integrating GSI datasets and mapping.

Additionally, local authorities should continue to collaborate with GSI on the protection and promotion of geological heritage surveys and individual geological heritage sites.

## 9. Ongoing Training of Local Authority and Regional Assembly Staff

To support the sector in relation to quarries and the planning process, additional training could be scoped out through the OPR and the Local Authority Planning Services Training Group.

Specific areas for consideration include:

- > Planning Enforcement and Courtroom Skills.
- > GIS Mapping.
- > Use of Drones.



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# Appendix A

## Questionnaires Issued to the 11 Local Authorities and Three Regional Assemblies

### Sample Quarry Questionnaire – Local Authority

1.0	Quarry Registration
1.1	When did your local authority last carry out a review of all quarries? _____ _____
1.2	Does your local authority undertake routine surveys of quarry developments in your functional area? Yes ____ No ____ If answered yes, please provide further details:
1.3	From our research we cannot locate the quarry Register on the local authority website. It is noted that the County Development Plan states that X quarries have been registered in County ..... Can you confirm the figure and if the absence of the quarry Register on the website is correct? _____ Yes ____ No ____
1.4	Are you aware that X quarries are registered on the <b>EPA Extractive Industries Register</b> for your area? Yes ____ No ____
1.5	If the two figures above, in answer to Questions 1.3 and 1.4, do not match please explain the reasons why: _____

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2.0	Complaints & Enforcement
2.1	<p>How many complaints, if available, did your local authority receive in relation to quarrying/extractive industry activities in 2023?</p> <p>(if the exact figure is not available please provide an approximate figure based on your professional judgement and experience in your local authority) _____</p> <p>_____</p>
2.2	<p>How many quarry cases are presently under investigation (at various stages) of the enforcement process?</p> <p>_____</p>
2.3	<p>Please indicate, where available, the number for each type of complaint category in 2023 as listed below:</p> <p>Unauthorised/No permission_____</p> <p>Hours of Operation_____</p> <p>Traffic Impact_____</p> <p>Noise &amp; Vibration_____</p> <p>Dust/Air Quality_____</p> <p>Water Supply &amp; Groundwater_____</p> <p>Landscape_____</p> <p>Natural &amp; Cultural Heritage _____</p> <p>Waste Management _____</p> <p>Other_____</p> <p>If quantitative data is not readily available on the detail of complaints to answer the above, please provide an approximate percentage and/or indicate if an area is not an issue of complaints, based on your professional judgement and/or experience in your local authority:</p> <p>_____</p> <p>_____</p>
2.4	<p>How many staff are assigned to the enforcement of quarries?</p> <p>_____</p>
2.5	<p>Is this number of staff sufficient in your opinion?</p> <p>_____</p>



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### 3.0 Legislation, Guidelines & Mapping

3.1	The Planning & Development Bill 2023 refers to the repeal of Section 261 and Section 261A of the Act of 2000. In your opinion how best can planning authorities ensure that quarries are effectively regulated and monitored in the future? _____
3.2	Can you describe your experience of implementing the Ministerial Guidelines for Planning Authorities on Quarries and Ancillary Activities (2004): - What areas have worked well; - What areas could be improved/operational challenges: _____
3.3	How useful did you consider the Ministerial Guidelines for Planning Authorities on Quarries and Ancillary Activities (2004) to be when dealing with each section of the Guidelines as listed in the table below:

Please tick the most relevant box:	Very Useful	Somewhat Useful	Not Useful	Please include any additional comments
To support the development of CDP policy in relation to quarries				
To support the consideration of environmental implications when assessing planning applications				
To support the assessment of quarry planning applications & Environmental Impact Statements				
To support the implementation of S261 of the Act				

3.4	On reflection, could the existing policy and objectives in your County Development Plan in relation to the Extractive Industry, in your opinion, be strengthened? (If yes please explain how and if no please explain why) _____ _____
3.5	Please detail the type of technology used to map quarries in your area: _____ _____
3.6	Please detail if quarry maps are publicly accessible or for internal use only: _____



4.0 Your Experience and Suggestions	
4.1	<p>Can you describe any <b>positive learnings</b> in your area with regards to the following:</p> <ul style="list-style-type: none"> <li>- <i>Registration of quarries</i></li> <li>- <i>Mapping of quarries</i></li> <li>- <i>Policy formation</i></li> <li>- <i>Approval of quarries</i></li> <li>- <i>Monitoring of quarries</i></li> </ul> <p>(e.g. specialist/focused staff, training, Planning &amp; Development Act/legislation, Ministerial Guidelines for Planning Authorities on Quarries and Ancillary Activities (2004) etc.)</p> <p><b>Response:</b></p>
4.2	<p>Can you give details of any <b>areas of difficulty</b> you have encountered in relation to the following matters:</p> <ul style="list-style-type: none"> <li>- <i>Registration of quarries</i></li> <li>- <i>Mapping of quarries</i></li> <li>- <i>Policy formation</i></li> <li>- <i>Approval of quarries</i></li> <li>- <i>Monitoring of quarries</i></li> </ul> <p>(e.g. interpreting legislation, implementation of the Ministerial Guidelines for Planning Authorities on Quarries and Ancillary Activities (2004), available staffing and expertise.)</p> <p><b>Response:</b></p>
4.3	<p>Please tell us about any <b>initiatives</b> in your area that you believe have improved the following:</p> <ul style="list-style-type: none"> <li>- <i>Registration of quarries</i></li> <li>- <i>Regulation</i></li> <li>- <i>Policy formation</i></li> <li>- <i>Approval of quarries</i></li> <li>- <i>Monitoring of quarries</i></li> </ul> <p>(e.g. staff training, funding, use of technology and/or protocols – e-planning etc.)</p> <p><b>Response:</b></p>
4.4	<p>How would you improve quarry policy, regulation and the approval system in your area?</p> <p><b>Response:</b></p>
4.5	<p>The Ministerial Guidelines for Planning Authorities on Quarries and Ancillary Activities (2004) were published twenty years ago in 2004. Are there any issues that have emerged in the intervening time that you feel would need to be given greater consideration in any potential review/update to the Guidelines?</p> <p>(For example the emergence of new environmental legislation etc.)</p> <p><b>Response:</b></p>

## Sample Quarry Questionnaire – Regional Assembly

1.0 Quarry Registration			
1.1	Does the Regional Assembly collect data on the number and type of quarries in your Region? _____		
1.2	As you may be aware the EPA maintain an Extractive Industries Register in order to meet the obligations of Regulation 19 of the Extractive Industries Regulations 2009. The Register can be viewed at <b>Extractive Industries Environmental Protection Agency</b> (epa.ie)  According to the Register there are XXX quarries in your region. Do you concur with this data and/or do you have alternative information? If so, please share details of such: _____		
2.0 Legislation, Guidelines & Mapping			
2.1	The Planning & Development Bill 2023 refers to the repeal of Section 261 and Section 261A of the Act of 2000. In your opinion would it be useful to continue the Register requirements for quarries into the future under the new Planning & Development Bill? _____		
2.2	Did you find the Ministerial Guidelines for Planning Authorities on Quarries and Ancillary Activities (2004) useful when preparing policy and objectives for the RSES? Please tick the relevant box below:		
<b>Very Useful</b>	<b>Somewhat Useful</b>	<b>Not Useful</b>	<b>Please include any additional comments</b>
2.3	Please include details about your experience (if any) of using and/or referencing the Ministerial Guidelines for Planning Authorities on Quarries and Ancillary Activities (2004) in your work in the Regional Assembly: _____		
2.4	Please also include new issues that have emerged since the publication of the Ministerial Guidelines for Planning Authorities on Quarries and Ancillary Activities (2004) that may now need to be addressed in your opinion (environmental legislation etc): _____		
2.5	In your opinion having regard to the upcoming review of the RSES does this create an opportunity to strengthen policy and objectives in the RSES in relation to the Extractive Industry? _____		

2.6	Has the Regional Assembly undertaken mapping exercises in relation to the location of quarries in your region? If so, please detail the type of technology used to map quarries in your Regional Assembly area: _____
2.7	Please state if the maps are publicly accessible or for internal use only: _____

### 3.0 Your Experience and Suggestions

3.1	<p>In your Regional Assembly role and through your work and engagement with the Local Authorities in your region, can you describe any <b>positive learnings</b> you have encountered in your region in relation to the following:</p> <ul style="list-style-type: none"> <li>- <i>Registration of quarries</i></li> <li>- <i>Mapping of quarries</i></li> <li>- <i>Policy formation</i></li> <li>- <i>Approval of quarries</i></li> <li>- <i>Monitoring of quarries</i></li> </ul> <p>(e.g. specialist/focused staff, training, Planning &amp; Development Act/legislation, Ministerial Guidelines for Planning Authorities on Quarries and Ancillary Activities (2004) etc.)</p> <p><b>Response:</b></p>
3.2	<p>In your Regional Assembly role and through your work and engagement with the Local Authorities in your region, have you encountered any <b>areas of difficulty</b> in relation to implementing the Ministerial Guidelines for Planning Authorities on Quarries and Ancillary Activities (2004)?</p> <p><b>Response:</b></p>
3.3	<p>Are you aware of any <b>initiatives</b> and/or <b>innovations</b> within your region by planning authorities that improve the implementation of the Ministerial Guidelines for Planning Authorities on Quarries and Ancillary Activities (2004):</p> <p>(e.g. relating to staff training, use of technology, Guidelines, legislation, and/or protocols, e-planning etc:)</p> <p><b>Response:</b></p>
3.4	<p>Having regard to the regional impact of quarries do you consider that there should be an enhanced role in the future for Regional Assemblies and the RSES with regards to the extractive industry and quarries?</p> <p>Yes/No</p> <p>Please elaborate:</p> <p>_____</p>

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# Appendix B

## References

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