



# Biodiversity management in the cement and aggregates sector



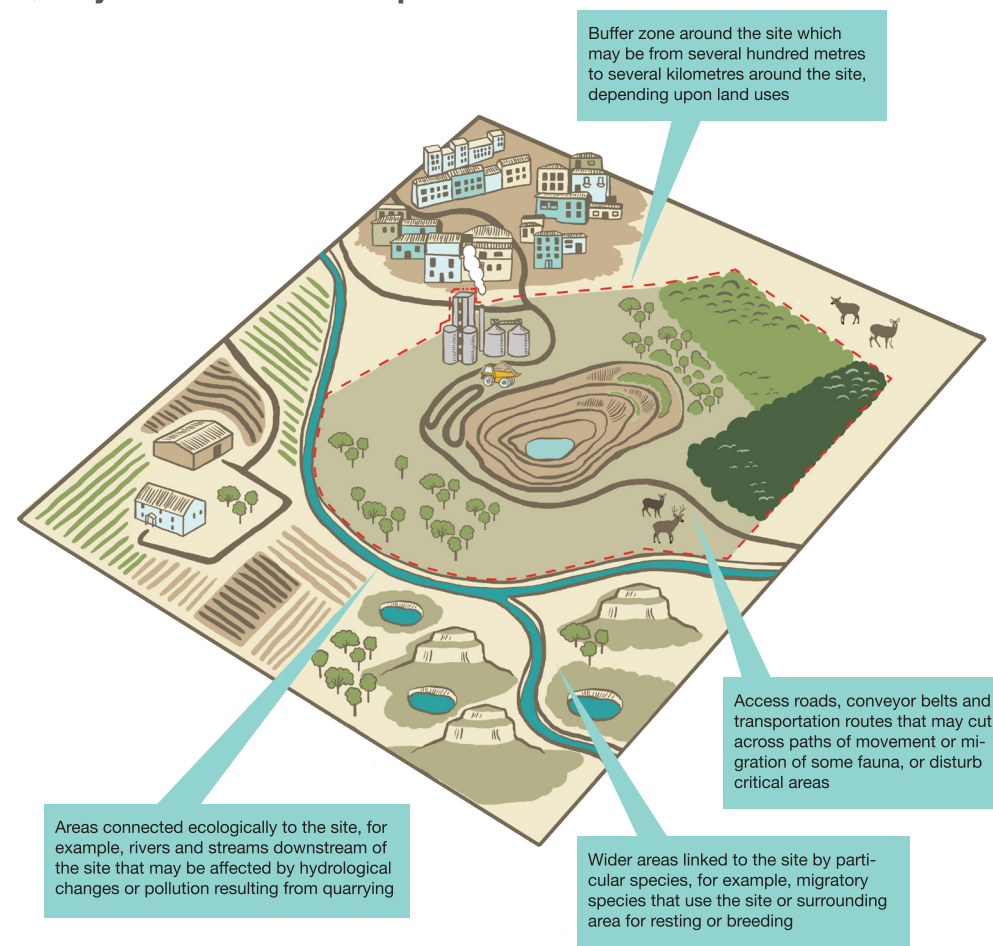
The quarrying of raw materials – such as limestone, shale, sand and gravel – for cement and aggregates production poses significant risks to biodiversity and ecosystems. Building Materials companies and policy makers must work together to find solutions that balance the needs of society, business and nature.

Responsible industry leaders recognise the importance of safeguarding biodiversity in and around their landholdings, to demonstrate good land stewardship and help ensure their continued license to operate and access to resources. Policy makers can support these efforts with regulatory

tools and incentives that help ensure that their nations' natural resources are protected and used sustainably.

Drawing on the lessons and experience of a multi-year engagement with Holcim, a leading supplier of cement and aggregates, IUCN has developed a series of guidance documents that address the risks and opportunities for biodiversity and ecosystems from quarrying for cement and aggregates. These documents emphasise the distinct but complementary roles that governments and businesses have to play in the conservation and sustainable use of natural resources.

## Quarry site within a landscape



## Guidance for business

The cement and aggregates sector faces both risks and opportunities related to biodiversity in and around their landholdings. If biodiversity is not managed responsibly, companies risk business disruptions stemming from lack of access to land and raw materials, both because they cannot secure permits and because they face increasing societal pressure to improve their performance. On the other hand, effective management of biodiversity presents opportunities for better site management, faster permitting and improved stakeholder relations. Implementing a comprehensive biodiversity monitoring and reporting system can help ensure informed decisions, support adaptive management and maintain accountability.

The guidance for business includes two complementary documents to help companies understand the impact they have across the lifecycle of a site and how to mitigate that impact. Both documents encourage companies to look outside the fence lines of their operations, at their broader impact on biodiversity and ecosystems.

Integrated Biodiversity Management System (IBMS): a system for managing biodiversity risks and opportunities in the cement and aggregates sector



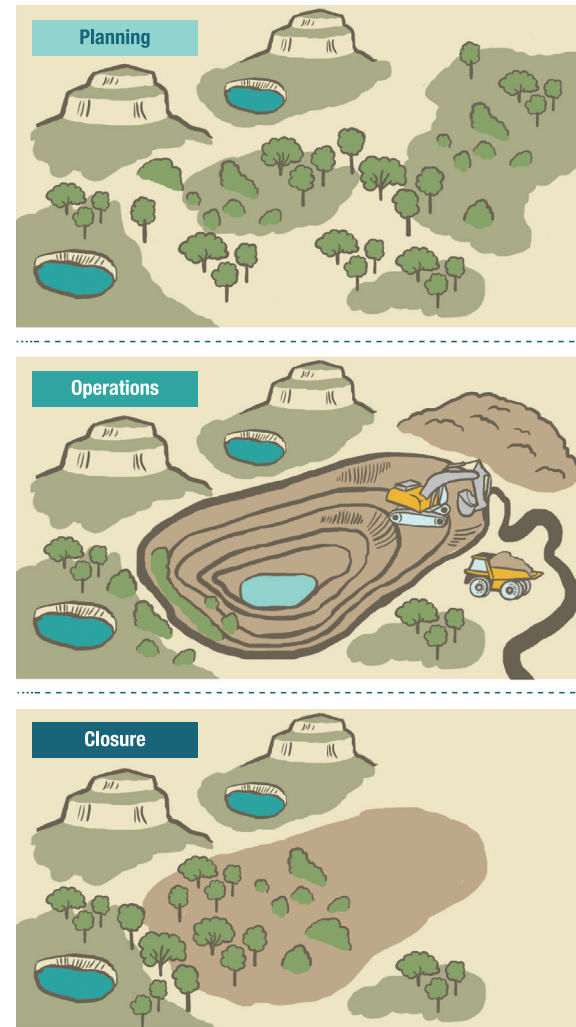
This first document guides companies in the adoption of an Integrated Biodiversity Management System (IBMS), to integrate biodiversity conservation considerations into their environmental management strategies and help ensure that they are following high standards of responsible environmental stewardship.

The guide includes recommendations for integrating biodiversity considerations into business thinking at corporate policy, decision making and operational levels. It allows companies to identify biodiversity risks and opportunities and achieve better biodiversity conservation outcomes throughout the lifecycles of their extraction sites, from project planning, through operations, and ultimately to closure.

The IBMS document includes guidance on:

- developing an overarching company-level policy to express company commitment to biodiversity conservation and state how this commitment will be integrated into actions and decision making;
- identifying risks and opportunities and prioritising the level of management needed at each extraction site;

## Biodiversity considerations in the lifecycle of an extraction site



Risk/  
opportunity  
assessment

Avoiding risks

Risk  
mitigation  
Biodiversity  
management  
Monitoring

Biodiversity  
monitoring

Seeking opportunities

- data requirements for the different stages of activities and what information is needed to correctly determine the risk classification;
- how to maintain and enhance biodiversity according to the level of risk, including what a biodiversity action plan should encompass; and
- monitoring to assess achievement of biodiversity targets.

The IBMS guide is supported and will be disseminated in collaboration with the following cement and aggregate industry associations: the World Business Council for Sustainable Development's [Cement Sustainability Initiative](#); [Cembureau](#), the European Cement Association; [FICEM](#), the Inter-American Cement Federation, and; [UEPG](#), the European Aggregates Association.

Biodiversity Indicator and Reporting System (BIRS): A habitat-based biodiversity monitoring system for the mineral extraction industry



This second document offers guidance to companies in the use of a Biodiversity Indicator and Reporting System (BIRS) to measure their effectiveness in safeguarding biodiversity at all operations. BIRS builds on and complements the IBMS by providing a framework to assess relative changes in the biodiversity condition of a site over time. It represents a balance sheet of the natural capital of a company, taking into account the size and condition of the different habitats present at each site, and summarises the composite value of all of a company's landholdings for supporting biodiversity. BIRS is not intended to replace site-specific monitoring activities prescribed in the IBMS for sites of high biodiversity importance; rather it gives an indicative snapshot of the company's overall biodiversity performance.

The key elements of the BIRS guide include:

- a methodology to calculate the habitat condition index of a site, which can be aggregated at country, regional and global levels;
- defined habitat categories that can be consistently applied to different types of sites, of different ages and in different parts of the world;
- worksheets for each habitat type, to use in assessing their condition; and
- recommendations for how the indicators can be used to set targets at the site, national or corporate level.

## Guidance for policy makers

To support and encourage the efforts of companies, governments need to provide an enabling regulatory framework that establishes the conditions for improved biodiversity management in the cement and aggregates sector. In order to create a level playing field and ensure that the right incentives are in place, policy makers can apply both command-and-control and market-based instruments. A regulatory framework for good biodiversity stewardship ensures that all players are held to the same standards and that proactive measures are rewarded.

A guide on regulatory tools for improved biodiversity management in the cement and aggregates sector



This document is aimed at national-level policy makers and regulators who are in the process of adopting, reviewing and implementing relevant regulatory tools to strengthen biodiversity standards for the extraction of construction materials. The guide is centred on a policy goal of fully integrating biodiversity management into resource extraction to achieve optimal outcomes for biodiversity, ecosystems and natural-resource-dependent communities. It discusses five principles that underpin the

design of regulatory tools to achieve this goal:

- The ecosystem approach informs land-use and strategic planning, as well as biodiversity management, from project inception to beyond closure.
- Sound science forms the basis for biodiversity assessments.
- Incremental biodiversity values trigger differentiated but proportionate responses.
- Impacts on biodiversity are addressed in the context of the mitigation hierarchy.
- Open, participatory and transparent processes support biodiversity management.

The document also explores the range of regulatory tools that can be used to promote responsible management of biodiversity in the cement and aggregates industry, including both command-and-control and market-based instruments, as well as supporting instruments that promote capacity-building, sustainability reporting and sustainable public procurement. The appropriate mix of command-and-control and market-based instruments will vary from country to country, depending on the different institutional arrangements that may be in place.

## About the IUCN-Holcim relationship

These guidance documents were developed over a period of seven years, building on the experience and knowledge acquired in the IUCN-Holcim relationship. IUCN's expert networks, in particular the Biodiversity Advisory Panel established for the relationship, were instrumental in developing the material presented in these guides.

IUCN's work with Holcim has enabled IUCN to understand how a company in the cement and aggregates sector operates and the challenges it encounters, as well as the opportunities that can arise from good biodiversity management. This collaboration has also highlighted the importance

of legislation, which sets the rules of the game and leads to the establishment of a level playing field.

With the release of this suite of documents, IUCN and Holcim aim to promote the widespread and effective implementation of this guidance, fostering collaboration across business, government and civil society to create better outcomes for biodiversity.

 To download these guidance documents go to: [www.iucn.org/cementandaggregates](http://www.iucn.org/cementandaggregates)

 For more information contact: [biobiz@iucn.org](mailto:biobiz@iucn.org)



INTERNATIONAL UNION  
FOR CONSERVATION OF NATURE

WORLD HEADQUARTERS  
Rue Mauverney 28  
1196 Gland, Switzerland  
mail@iucn.org  
Tel + 41 22 999 0000  
Fax + 41 22 999 0002  
[www.iucn.org](http://www.iucn.org)