

# SVEMIN'S GUIDANCE Biodiversity Management Plan (BMP)

SveMin

### **About the guidance**

Report January 2022

This guidance presents methods for establishing and implementing a systematic program of work to enhance biodiversity. The guidance is primarily aimed at companies in the mining and mineral industry. Svemin also hopes to inspire other sectors in adopting similar approaches and methods.

This guidance has been compiled as part of the project, Mining with Nature - The road to the goal!, funded by SIP SMI, Boliden, and LKAB. The consultancy firm, Ecogain, led the project, working in close collaboration with Svemin's Working Group for Nature, with representatives from Boliden, Cementa, LKAB, Nordkalk, Zinkgruvan, and Kaunis Iron. This guidance is based on the industry's roadmap for biodiversity, **Mining with** Nature.

#### **SWEDISH** MINING INNOVATION























## SveMin

#### **SVEMIN**

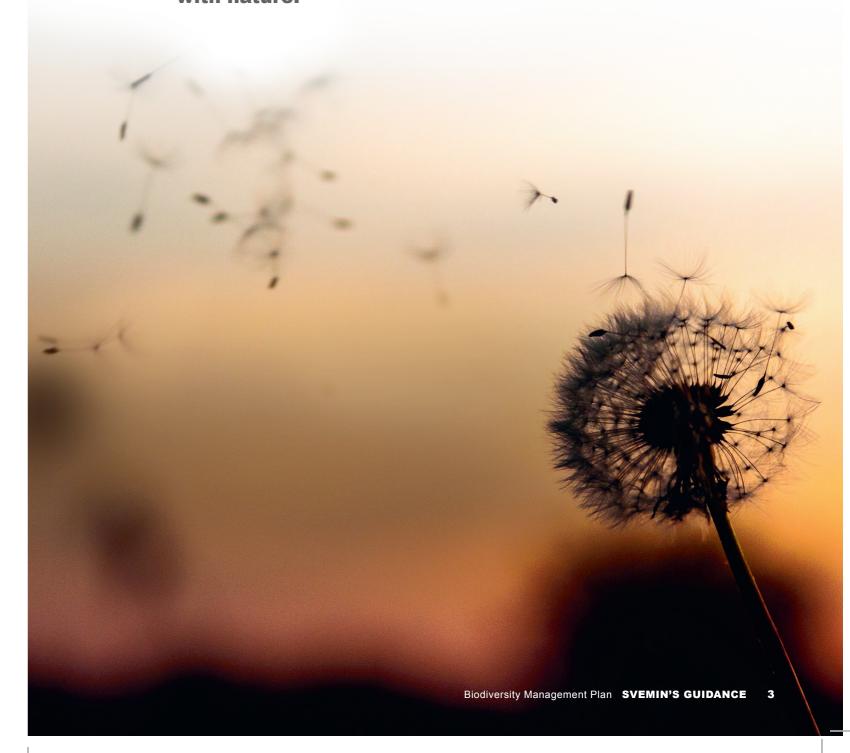
Svemin is the branch organization for mining, minerals, and metal producers in Sweden. Svemin represents around 40 companies in the fields of production, prospecting, and associated technologies. The main materials produced are metals and limestone.





The Swedish mining and minerals industry's goal is, by 2030, to contribute to increased biodiversity in all regions with active mining and prospecting.

In order to achieve this goal, the industry is investing even more into developing innovative solutions for sustainable land use in harmony with nature.



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## 1. PURPOSE

The Swedish mining and minerals industry's overall ambition in the area of biodiversity is detailed in the roadmap, Mining with Nature. This handbook, "Mining with Nature - the road to the goal!" has been produced to support the implementation of the roadmap. Svemin's intention is that the handbook will guide and support its member companies in developing and implementing company and site-specific management plans for biodiversity.

The benefits of systematic work for biodiversity include:

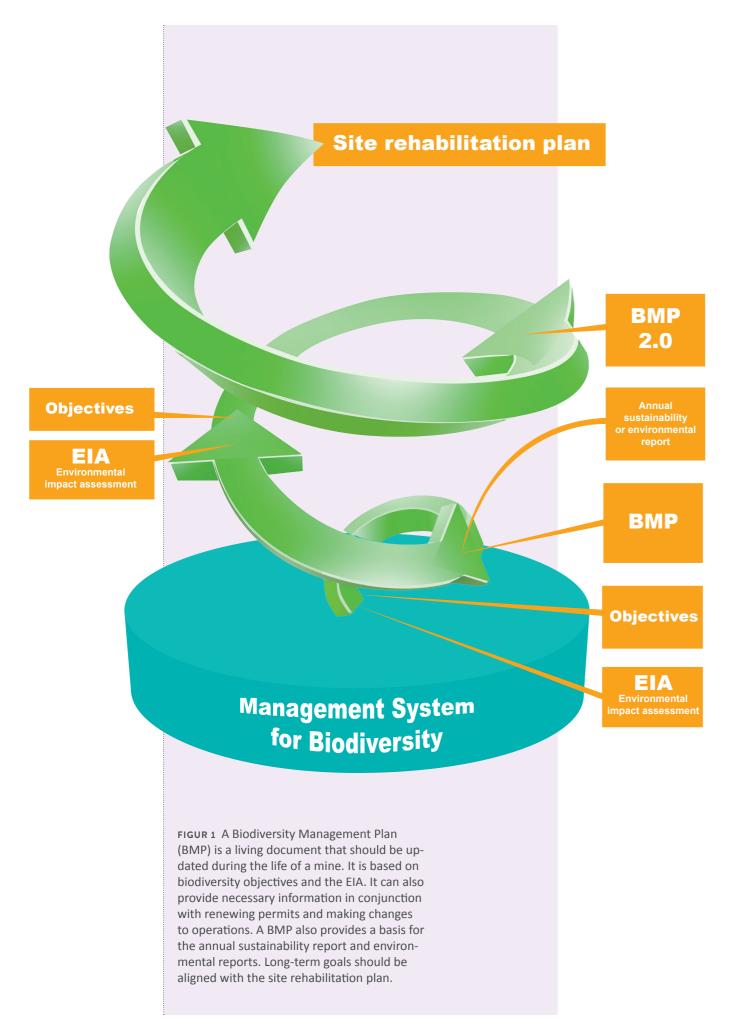
- Creating societal benefits by supporting the sustainable development goals
- ► Gaining access to land through environmental permits
- ▶ Meeting the demands of stakeholders, customers, and landowners
- Attracting and retain competent staff
- ► Ensuring timely and efficient efforts in meeting company environmental objectives
- Minimizing risks and take advantage of opportunities
- Enabling transparent reporting

Systematic work to promote biodiversity is a relatively new field. Ongoing rapid developments and knowledge-building are taking place in the areas of measurability methods and concrete tools. The guidance will be updated as new knowledge is developed and new guidelines are adopted.

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By working systematically towards increased biodiversity, we can also create wider benefits to society and contribute to meeting the global sustainable development goals.





## 2. **DEFINITIONS**

#### **Management Systems for Biodiversity**

A document or management system sets out the overall structures and goals for biodiversity, including designating responsibilities, and annual planning and budget process. The document also includes set times and intervals for audits as well as providing a detailed system or methods for reporting. These can be integrated into existing environmental management systems. Below follows a description of how a BMP relates to companies' other guidelines, systems, documents, and plans.

#### **Biodiversity Management Plan (BMP)**

A plan that details objectives and actions for biodiversity per area of operation. It covers various types of activities - from prospecting to project development, operations and management through to site rehabilitation, thus taking a long-term perspective. The plan covers the operation site, its immediate vicinity, and any areas for ecological compensation. The plan must contain a clear objective, as well as background information, planning, documentation, and measures for monitoring and reporting progress towards the set objectives. The plan can be presented in the form of a document, mapping tool or a combination of both. The plan can be integrated with existing planning and documentation systems for compliance and land use planning, where appropriate.

#### **Detailed instructions on biodiversity measures**

The successful implementation of a plan for biodiversity requires that responsibilities are assigned and that cooperation is established between operators, contractors, and relevant ecological expertise. Where necessary, detailed instructions should be given for how the measures specified in the BMP are to be carried out.

## Relationship to other steering documents and plans

Companies' internal goals and ambitions as well as permit conditions lay the foundation for a BMP (figure 1). In the case of new mines, the information gathered during exploration, the project development phase, and during the environmental permitting process must be implemented in the operational phase through a BMP. In the case of existing mines, a BMP provides a valuable knowledge base for further permit examination. A BMP also contributes data to companies' annual sustainability report and environmental reports. New knowledge and new permit conditions can necessitate revision to the BMP. Long-term goals in the BMP should be aligned with visions or plans for site rehabilitation after operations have ceased.

A BMP designates the objectives and measures for the various parts of operations, aligned with the company's internal qoals. licensing conditions, and longterm plans for site rehabilitation.

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## **MANAGEMENT SYSTEMS FOR BIODIVERSITY**

## 3.1 Establishing a Management **System for Biodiversity**

- 1. Appoint the person responsible for coordinating the work, set aside adequate resources, and define procedures and responsibilities for decision-making.
- 2. Analyze business risks and opportunities linked to biodiversity. Examples of opportunities are obtaining permits, securing financing, attracting staff, and increasing social acceptance.
- 3. Decide on goals and level of ambition for biodiversity at company level and designate responsibility.
- 4. Investigate and describe how biodiversity work is to be implemented in relation to existing environmental work and day-to-day tasks, as well as how biodiversity is to be integrated into existing environmental management and operation planning systems.
- 5. Describe how biodiversity should be considered when balancing conflicting interests.
- 6. Describe how biodiversity aspects should be incorporated into the annual planning and budgeting process and designate responsibility for this.
- 7. Describe how competence to carry out the work should be ensured within the organization.
- 8. Describe how the work for biodiversity is to be communicated (internally and externally), monitored, revised, and reported (internally and externally) at an overall level, at what intervals this is to take place and who is responsible for this.

#### Recommended features of a Management System for Biodiversity

- ▶ Biodiversity goal at company level
- ▶ Responsibilities, mandates, and supply of skills
- ▶ Biodiversity Management Plan in relation to existing environmental work and day-to-day activities
- ▶ Routines that ensure biodiversity is always included in managing conflicts of interest (as regards technology, reindeer husbandry, social aspects)
- Annual planning and budget process
- ▶ Routines for communication (internal and external), monitoring, auditing and reporting (internal and external)

management system for biodiversity forms the basis for the BMP.



## **BIODIVERSITY MANAGEMENT PLAN (BMP)**

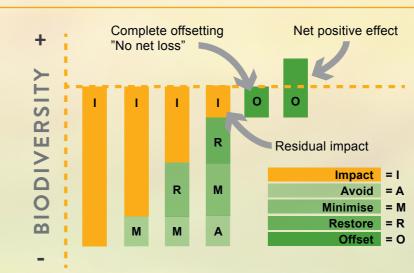
## 4.1 Establishing a Biodiversity **Management Plan (BMP)**

The process of developing a BMP should focus on identifying and evaluating relevant aspects of biodiversity, and finding ways to preserve, and, if possible, strengthen these. It includes:

- Avoiding harm during preparatory work, as well as the establishment and
- Minimizing impacts by strengthening biodiversity where possible (fwith temporary changes and measures in nature in the immediate area).
- ▶ Planning for site rehabilitation (if possible, carrying out successive site rehabilitation).
- Planning and implementing compensation measures, when necessary.

A BMP can ensure good planning, documentation of trade-offs, implementation, and monitoring, and thereby demonstrate how the mitigation hierarchy (figure 2) can be applied.

#### THE MITIGATION HIERARCHY



FIGUR 2 The mitigation hierarchy is a step-by-step process for reducing impacts on biodiversity.

The company can ensure that it follows the mitigation hierarchy by implementing a BMP.

#### 4.1.1 Ensuring good organizational conditions

#### Before initiating work with the plan

- 1. Designate responsibility for establishing the BMP and managing associated work. Responsibility must be clearly identified and accompanied by a mandate over financing and resources to implement the plan. Thus it must be at a level within the company's hierarchy that ensures the issue is taken into account at a high level as well as balanced against other business goals.
- 2. Set aside resources (personnel and financial) to produce a BMP.
- 3. Ensure necessary competence to carry out the work.

#### During the work with the plan

- 4. Designate responsibility for planning, implementing, documenting, and monitoring the respective actions in the BMP.
- Estimate personnel and financial needs and specify which competencies are required to carry out the measures and how the organization is to ensure their availability.

#### 4.1.2 Involving internal and external stakeholders

Conduct a stakeholder analysis to ensure appropriate involvement.

- Identify internal and external stakeholders, such as management, operating staff, production planners, municipalities, county administrative boards, the Sami indigenous people and reindeer industry, non-profit organizations, local residents, schools, and universities.
- 2. Identify needs for stakeholder dialogue, involvement and appropriate methods.
- 3. Ensure consultation with and involvement of stakeholders.

#### 4.1.3 Developing a Biodiversity Management Plan (BMP)

A biodiversity management plan should be developed by staff with relevant background knowledge and/or in collaboration with ecological expertise. It can be a coherent plan or divided into a plan for one or more operation areas and one or more areas for ecological compensation.

- 1. Map out essential biodiversity aspects.
  - a) Permit conditions related to biodiversity.
  - Existing information on biodiversity within the operational site and its immediate vicinity.
  - If necessary, carry out ecological surveys to provide data on the current situation and establish a baseline.
- 2. Analyze risks and opportunities; identify threats to biodiversity as well as and potential opportunities to benefit biodiversity. Identify business risks linked to biodiversity at the operational level (e.g., costs of environmental damage, reputational risks, and social acceptance). In the risk analysis, inspiration can be taken from the company's broader work mapping environment risks.

- Prioritize and set goals for the operations.
  - a) Based on the current situation, risks, and opportunities (to avoid damage and/or increase values).
  - b) Formulate and prioritize site-specific goals for biodiversity. These can be goals for specific species, habitats, and ecosystems. The goals can be formulated in both the short and long term. Short-term goals can ensure that measures are implemented correctly and monitor developments in the natural environment. Long-term goals should be consistent with the goals for site rehabilitation.
  - c) The goals can advantageously be aligned with regional or local environmental objectives.
- Specify actions.
  - a) Describe the measures to be implemented to achieve the set goals and set deadlines for them.
  - b) Measures required to meet the operation's permit conditions should of course be prioritized in the BMP.
  - c) If necessary, provide detailed instructions for the measures to be implemented.
- 5. Establish monitoring, with appropriate indicators based on goals and measures.

**Note:** A BMP is a living document that can be built step by step, initially with more general information, or limited to the permit conditions, and subsequently expanded with more information.

## **Essential biodiversity aspects**

In general, the assessment should include the presence of biotopes and species and the dispersal corridors that are important to them. This is done through mapping:

- Areas of nature value class 1-4, with information about and geographical delimitation of the included biotopes in different nature value objects (the delimitation and definition of biotopes are not always included according to SIS inventory as the standard is currently interpreted differently)
- Red-listed or endangered species
- Characteristic species and typical species (linked to Natura 2000 habitat types)
- Green infrastructure or dispersal corridor

Ecological expertise is needed to identify and assess the above as significant aspects var in different landscape segments.

A BMP is a living document than can be built stepwise.

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A BMP should be easy to review and understand, accessible to operational staff and easy to update as necessary

## **4.1.4 Proposed content of the Biodiversity Management Plan (BMP):**

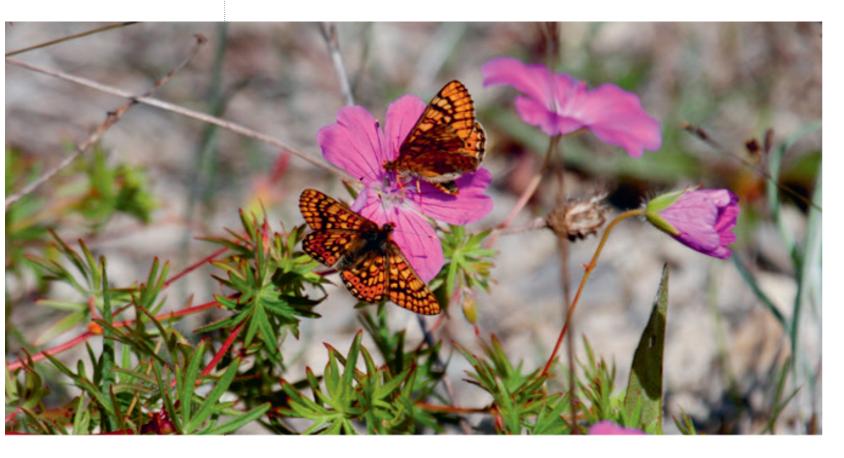
The plan can be in the form of a written document, a spreadsheet, a map tool, included in existing systems, or a combination of these formats. Regardless of format, the plan should be easy to understand, updated when necessary, and easy for staff to locate and use.

Examples of relevant section headings include:

- ▶ General description of the operating site and landscape conditions
- Current state of essential biodiversity aspects (including permit conditions related to biodiversity)
- Designated responsibilities
- ► Collaboration, consultation, and stakeholders
- ► Risks and opportunities (how risks are managed, and opportunities are utilized following the mitigation hierarchy)
- Site-specific goals
- Prioritized measures (what is to be done and when, preferably linked to a map, with a description of the desired outcomes with quantifiable indicators)
- Documentation of measures (including when they were implemented and by whom)
- Monitoring plan and documentation of results
- Auditing procedures

#### Detailed instructions on biodiversity measures

The content should be tailored to specific needs, prior to implementation. Here, a reference can be made to how the measures are to be later documented and reported in the BMP.



# 4.2 Implementing the Biodiversity Management Plan (BMP)

- Ensure that responsible staff have the resources needed to carry out the work according to plan
- 2. Train and engage relevant staff
- 3. If necessary, develop company-specific or site-specific manuals and guides
- 4. Implement the measures according to plan
- 5. Ensure that relevant staff find the BMP to be both informative and user-friendly. Update and revise the BMP during the implementation phase, if necessary.

# Factors for the successful implementation of a BMP

- A clear commitment from management
- The inclusion of biodiversity in existing policies and guidelines
- Company-specific, operational manuals and tools
- Appropriate management structures and processes
- The establishment of a central database for biodiversity
- Internal competence and awareness built through education
- · A positive approach on the part of operational staff
- Partnership with external expertise or specialists
- Sufficient financial resources

## 4.3 Keeping the Biodiversity Management Plan current and updated

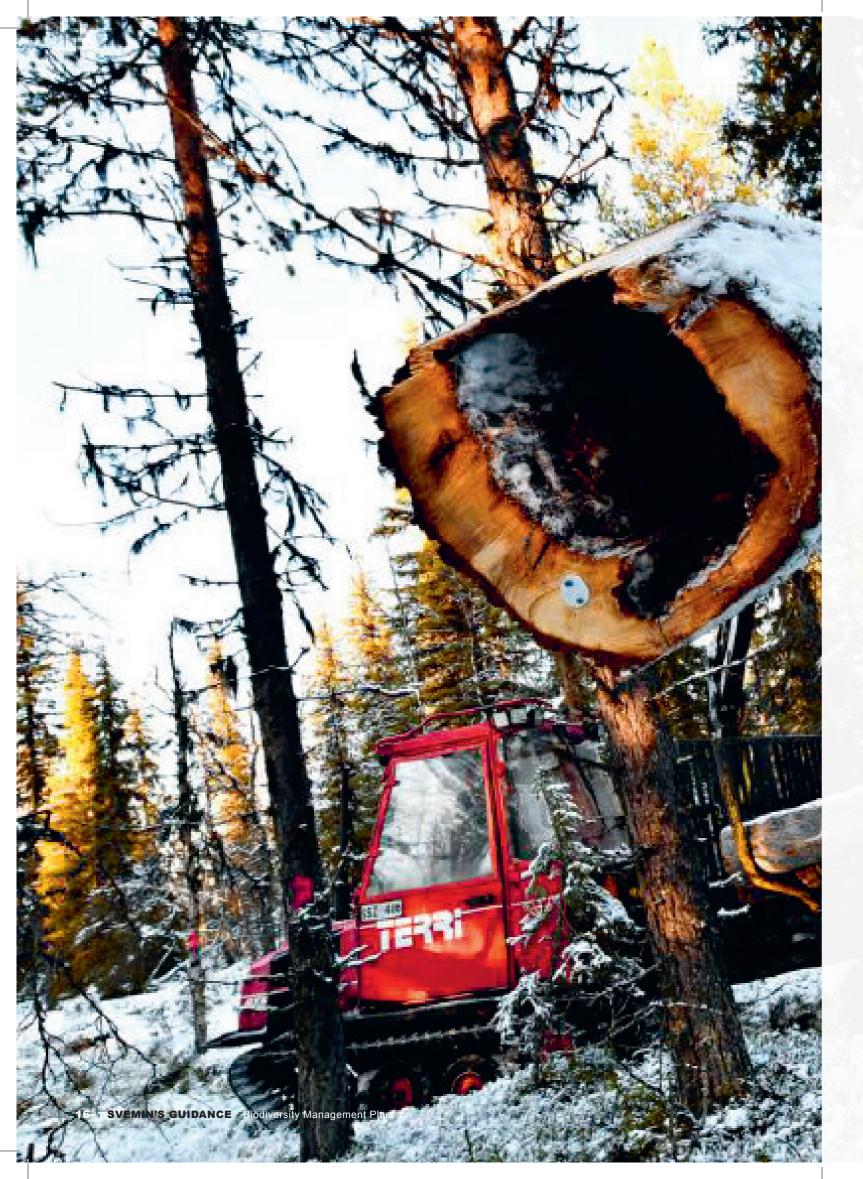
- 1. Carry out monitoring activities according to plan
- 2. Evaluate the effectiveness of the measures in terms of achieving the set goals
- If necessary, revise the BMP when new knowledge is available.
  This can include adding or adapting various measures in the BMP.

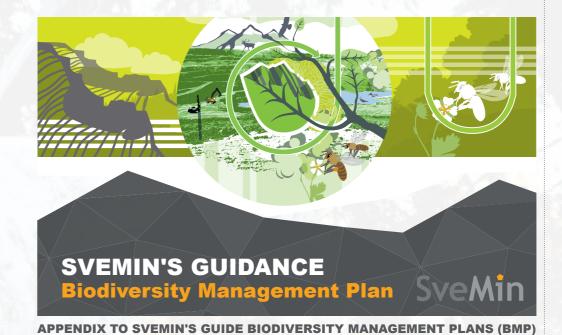
## 4.4 Reporting on biodiversity

Report positive and negative impacts on biodiversity per area of operations and at company level. Reporting can include planned and implemented measures, as well as results from monitoring reviews.

The guidance on reporting should be developed as standardized methods and guidelines on reporting emerge.

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## **APPENDIX FURTHER READING** AND CONCRETE EXAMPLES

January 2022

## **Guidelines and manuals** on biodiversity

**Towards Sustainable Mining (TSM) Biodiversity Conservation Management** protocol

Mining association of Canada (MAC) 2020

The TSM standard program has received international recognition. The standard supports mining companies in handling major risks related to the environment and communities. It includes a protocol for biodiversity. The standard provides guidance to companies on how to successively raise their level of ambition regarding biodiversity. The protocol is structured around companies' commitments, action plans, and reporting.

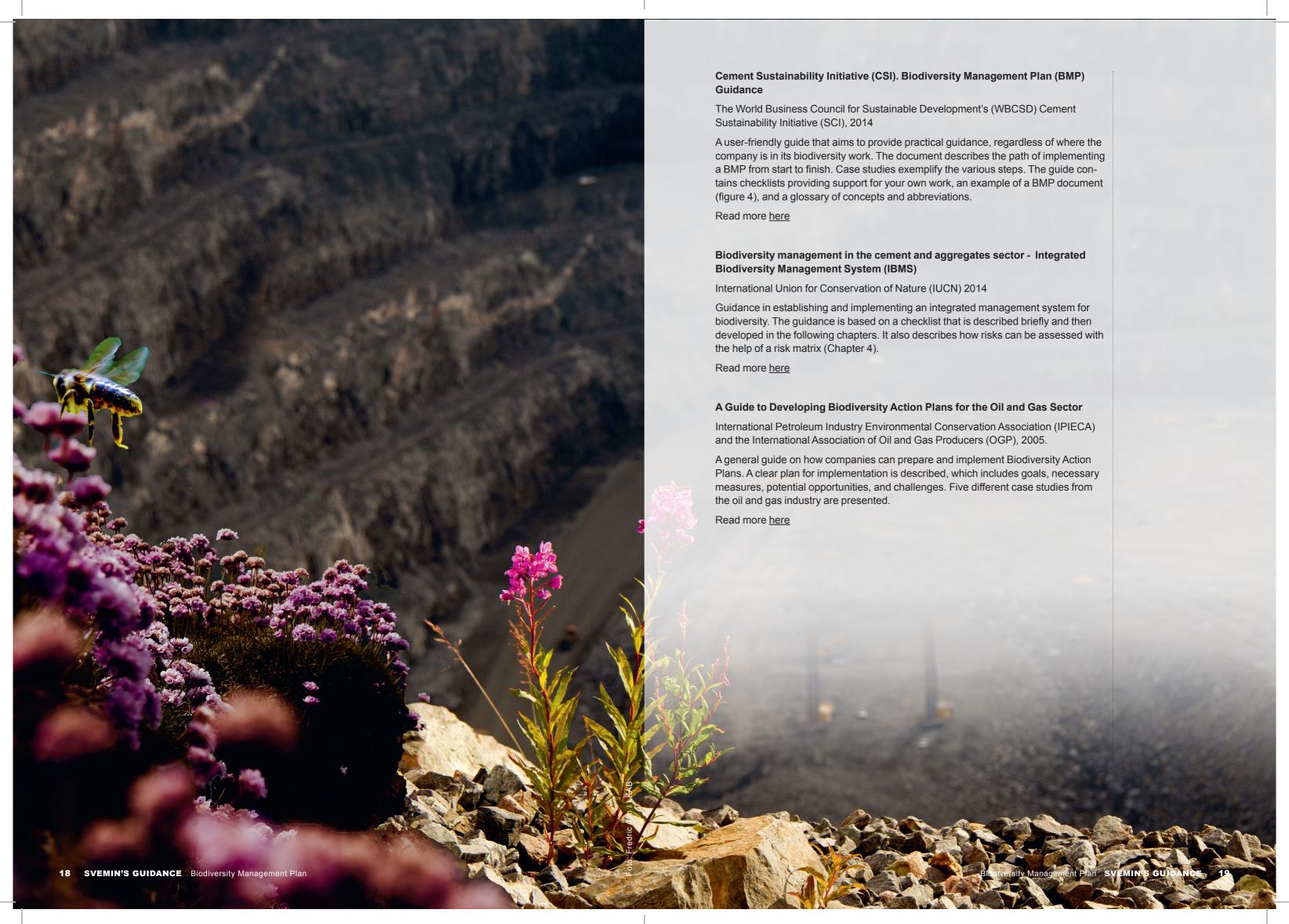
Read more here

#### **Good Practice Guidance for Mining and Biodiversity**

International Council on Mining and Metals (ICMM) 2006

Guidance in helping mining companies to understand and identify their impacts on biodiversity, to reduce their negative impact and instead find ways to contribute to strengthening biodiversity. Sections A and B introduce biodiversity and how it can be integrated into the various stages of operations. Section C provides suggestions for tools and processes for evaluating, monitoring, and improving biodiversity in the mining industry.

Read more here



## To measure and report on biodiversity

#### ISO standard for biodiversity

There has been a SIS standard for ecological habitat surveys in Sweden, SS 199000, since 2014. The purpose of an ecological habitat survey (Naturvärdesinventering, NVI) is to describe and evaluate natural areas to identify biodiversity. This standardized approach facilitates both the procurement and interpretation of results from ecological habitat surveys. The standard will be revised in 2021.

In 2020, an ISO committee was established with the aim of developing comprehensive and global standards for biodiversity. SIS Technical Committee 623 (SIS/TK 623) is the Swedish committee for the work. The work is currently in an early phase.

https://www.iso.org/committee/8030847.html

https://www.sis.se/standardutveckling/tksidor/tk600699/sistk-623/

https://www.sis.se/standardutveckling/tksidor/tk500599/sistk555/

#### CLImB - Swedish method for measuring and quantifying biodiversity

CLImB (Changing Land Use Impact on Biodiversity) is a collaborative project funded by SIP SMI and nine Swedish business actors with the aim of developing a standardized and well-founded method for evaluating biodiversity in connection with changing land use in Sweden. The project was initiated in 2020 and the implementation phase is expected to commence in 2022. The method will help companies to jointly quantify and communicate their impacts, both negative and positive, on biodiversity..

https://www.ecogain.se/climb

#### **Natural Capital Protocol**

The Natural Capital Protocol is a framework that enables organizations to identify, measure and evaluate their direct and indirect impacts and dependencies on natural capital, and make informed decisions. The protocol includes tools that make the values generated by biodiversity visible.

https://capitalscoalition.org/capitals-approach/natural-capital-protocol/?fwp\_filter\_tabs=training\_material

https://capitalscoalition.org/guide\_supplement/biodiversity-4/

#### Corporate Sustainability Reporting Directive, CSRD

In 2021, the European Commission proposed a new directive for sustainability reporting, the Corporate Sustainability Reporting Directive (CSRD), as part of the European Green Deal. The new directive entails more detailed reporting requirements following mandatory EU standards for sustainability reporting. One of the requirements involves reporting on biodiversity and ecosystems. Companies will probably need to start reporting according to the new standards in 2024, based on the information from the financial year 2023. The main themes for the CSRD are similar to the objectives in the EU Taxonomy.

https://ec.europa.eu/info/business-economy-euro/company-reporting-and-auditing/company-reporting/corporate-sustainability-reporting\_en#review

#### **Transparent & Align project**

Two EU-funded projects that will develop key performance indicators and measures that can form the basis for companies' sustainability reporting in line with the CSRD. The Transparent Project focuses on how specific areas of natural capital - air, water, and land - can be measured and reported upon. The sister project, Align (Align Accounting Approaches for Nature), aims to develop a generally accepted set of methods, indicators, and criteria for measurement tools and thereby a standardized approach to measuring companies' impacts and dependencies on biodiversity.

https://capitalscoalition.org/project/transparent/

https://ec.europa.eu/environment/biodiversity/business/align/index\_en.htm

#### Task-Force on Nature related Financial Disclosure, TNFD

The TNFD provides a framework for managing and reporting nature-related risks, with the aim of redirecting global financial flows from nature-negative outcomes to nature-positive outcomes. TNFD is a compilation of existing tools, to enable world-wide alignment of nature-related reporting.

https://tnfd.global

# **Examples of Biodiversity Management Plans**

#### **Glencore Biodiversity management Plan**

62 pages, last revised 2021.

A well-structured BMP that begins with a glossary, purpose, overview maps, and division of roles and responsibilities. The report contains a flow chart of the "Tree Clearing Procedure" which can also serve as inspiration for other measures, where different steps can be clarified (Figure 7, p. 29). Section 7.7 lists risks associated with compensatory measures. References are made throughout the text that make the documentation easy to find.

https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUK <u>EwjSqoezqtT0AhXKRfEDHYLAAo0QFnoECBQQAQ&url=https%3A%2F%2Fwww.</u> glencore.com.au%2F.rest%2Fapi%2Fv1%2Fdocuments%2Fec255d91dbfd5e87582 4333760e1846f%2FBiodiversity%2520Management%2520Plan.pdf&usg=AOvVaw0 v8XLPhRyd7D6EIZSkzc a

#### Arafura Resources Limited – Biodiversity Management Plan

68 pages, developed in 2016.

A short and easily accessible BMP. The purpose is clearly described in section 1.2. Several clear maps of existing vegetation in the various areas of operations can be found in section 2.1. Section 3 describes the impacts and risks, objectives, and protective measures. Section 3.3 specifies delegated responsibilities for each measure. Section 4 covers risk monitoring and management. Appendix C presents how the company has worked to identify its risks, using a risk matrix that is made available in its entirety.

https://www.arultd.com/images/EIS/DOCUMENTS/Volume5/Nolans\_EIS\_ Appendix\_X\_D\_web.pdf

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#### **Tomingley Gold Operations Biodiversity Management Plan**

60 pages, revised in January 2017.

Initially, this BMP describes the existing biodiversity in the areas of operation and then presents goals and measures for biodiversity, as well as the time frame for each goal and measure. It gives the reader a clear picture of how the company is working with biodiversity (section 5). A "Biodiversity Offset Risk Management Strategy and Trigger Action Response Plan" (section 6.5) shows a clear risk analysis for the work on biodiversity, including how the risks are to be avoided or managed. The plan does not cover site rehabilitation. Roles and responsibilities are presented clearly in section 12.

https://www.alkane.com.au/wp-content/uploads/2018/02/Biodiversity-Man-Plan-R6final.pdf

#### South 32 Illawa Metallurgical Coal - Appin mine Biodiversity Management Plan

60 pages, revised in January 2021. Next revision January 2024.

This BMP provides detailed information about the nature in the surrounding area and measures to minimize the company's impacts. It also includes the post-treatment phase. The methodology for different field surveys is described. Roles and responsibilities are presented in a simple way in section 2; overview maps are available as appendices on pages 30-33. The area covered by this BMP is relatively small compared to several other BMPs.

https://www.south32.net/docs/default-source/illawarra-coal-bulli-seam-operations/ management-plans/epbc-approval/bso-biodiversity-managment-plan-20190326. pdf?sfvrsn=57f3d185 16

#### Tarrawonga Coal Mine - Biodiversity Management Plan

214 pages, revised November 2020.

A BMP with a clear introduction and recommended reference materials. The background is divided into two parts. Part A describes how flora and fauna are handled within the mining area and Part B describes how these are handled within the compensation area. Each section contains a description of the natural environment and the measures taken. Chapter 7, page 126, contains a table with identified risks and measures. The C-appendices have clear tables with descriptions of natural values and associated images. Delegated responsibilities are presented in section 1.4.

https://whitehavencoal.com.au/Documentations/Tarrawonga%20Mine/Environmental%20Management,%20Monitoring%20&%20Compliance/Environmental%20 Management%20Plans,%20Strategies%20and%20Programs/TAR-Biodiversity%20 Management%20Plan.pdf

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For more information, visit: svemin.se/mineralbidraget

