

Item 02 – GRI Topic Standard Project for Biodiversity – Final draft

For GSSB approval

Date	30 November 2023
Meeting	14 December 2023
Project	GRI Topic Standard Project for Biodiversity
Description	This document presents the revised GRI Biodiversity Standard, for GSSB approval.
	A summary of key changes in the Standard compared to the exposure draft is presented in the explanatory note at the beginning of the document.
	This document reflects the final outcome and consensus of the GRI Biodiversity Technical Committee deliberations.
	This document is complemented by Item 03 – GRI Topic Standard Project – Draft GSSB basis for conclusions, which summarizes the significant issues raised by respondents during public comment and the GSSB responses to these.
	Effective date
	As part of this approval, the GSSB is also asked to consider the proposed effective date of 1 January 2026 (see line 118) for <i>GRI 101: Biodiversity 2024</i> .
80CU	This effective date allows for an ample transition period, ensuring sufficient time for organizations to incorporate GRI 101 in their process and start collecting data relevant to the revised biodiversity disclosures. The effective date also coincides with the effective date of the GRI Sector Standard for Mining, subject to GSSB approval on 14 December 2023.
(his	· · ·

This document has been prepared by the GRI Standards Division and is made available to observers at meetings of the Global Sustainability Standards Board (GSSB). It does not represent an official position of the GSSB. Board positions are set out in the GRI Sustainability Reporting Standards. The GSSB is the independent standard setting body of GRI. For more information visit www.globalreporting.org.

Explanatory note

2 This section summarizes the key changes in GRI 101: Biodiversity 2024 compared to the exposure

3 draft. These changes are recommended by the Technical Committee based on comments from the

public comment period. Please note that only key changes are listed in this summary; smaller
 wording or editorial changes are not included.

6 Disclosure 101-1 Policies to halt and reverse biodiversity loss

The term 'science-based approach' has been replaced by 'scientific consensus'. See lines
 292-294.

9 Disclosure 101-2 Management of biodiversity impacts

- Revised requirement 101-2-a-iii to make a distinction between restoration and rehabilitation, and to include the goals of the restoration and rehabilitation, and stakeholder engagement.
 See lines 360-362.
- Added new requirement 101-2-b on the size of the area under restoration or rehabilitation
 and the size of the area restored or rehabilitated. See lines 365-368.
 - Added a recommendation to report the stage of the restoration and rehabilitation actions. See lines 461-467.
 - Added new requirements 101-2-c-i to 101-2-c-iv for reporting additional information on offsets. See lines 369-373.
 - Revised requirement 101-2-d on biodiversity management plans to understand which of the operational sites with the most significant impacts on biodiversity have a biodiversity management plan and which ones do not, and why. See lines 374-376.
- Requirement 304-6-d to 'describe how it addresses the negative impacts of the transition to
 halt and reverse the loss of biodiversity on workers and local communities' has been moved
 to Disclosure 101-2. It has been replaced by requirement 101-2-f to 'describe how it ensures
 that the actions taken to manage its impacts on biodiversity avoid and minimize negative
 impacts and maximize positive impacts for stakeholders'. See lines 379-380.
 - Removed the requirement to report contextual information.

28 Disclosure 101-3 Access and benefit-sharing

- This disclosure was exposed for public comment twice. The first exposure resulted in the followingchanges:
 - All requirements were replaced by two new requirements. The first one requires to report the process to ensure compliance with access and benefit-sharing regulations and measures. The second one requires to report actions that are taken in addition to or in absence of regulations and measures. See lines 595-598.
- 35 The re-exposure supported the new requirements. It resulted in the following changes:
 - Clarified guidance on how the process to ensure compliance with access and benefitsharing regulations and measures should be reported. See lines 633-641.
- Added guidance to refer to the new agreement under the UN Convention on the Law of the
 Sea and added an option to report if processes and actions are implemented to ensure
 access and fair and equitable benefit sharing of marine genetic resources. See lines 623 630.

42 Disclosure 101-4 Identification of biodiversity impacts

Added a new disclosure, replacing requirement 304-1-a 'explain how it has determined
 which of its operational sites and its suppliers' operational sites have the most significant
 impacts on biodiversity'. The disclosure requires information on how an organization
 determined which of its sites and which products and services in its supply chain have the
 most significant impacts on biodiversity. It provides new recommendations for reporting this



15

16

17

18 19

20

21

27

31

32

33

34

36

37

- 48 disclosure and additional guidance on how to identify the most significant impacts on 49 biodiversity. See lines 660-806.
- 50 **Disclosure 101-5 Locations with biodiversity impacts**
- Removed the requirement to report the coordinates of the organization's operational sites.
- Revised requirement 101-5-b to align with the Taskforce on Nature-related Financial
 Disclosures (TNFD). 'Ecologically sensitive area' replaces 'area of high biodiversity value'.
 See lines 813-819.
- Revised requirement 101-5-c to report the organization's activities that take place in each operational site with the most significant impacts on biodiversity, replacing the requirements to describe the organization's activities per operational site and per direct driver of biodiversity loss, which were included in Disclosure 304-2 Direct drivers of biodiversity loss. See line 820.
- Revised requirement 101-5-d to report the products and services in its supply chain with the
 most significant impacts on biodiversity, replacing the requirements to describe the
 suppliers' activities per operational site and per direct driver of biodiversity loss, which were
 included in Disclosure 304-2 Direct drivers of biodiversity loss. See lines 821-823.
- Added reporting options to report the percentage of operational sites in or near ecologically
 sensitive areas and the proportion of total high-impact commodities sourced respectively, to
 provide a high-level understanding of the significance of biodiversity across the
 organization's operations and its supply chain. See lines 867-874 and lines 896-905.

68 Disclosure 101-6 Direct drivers of biodiversity loss

- Removed the requirement to report Scope 1, Scope 2, and Scope 3 greenhouse gas
 emissions. Revised the guidance to explain that an organization can report its greenhouse
 gas emissions using *GRI 305: Emissions 2016*.
- Revised requirement 101-6-a-i to include the cut-off date or reference date and the type of
 ecosystem after conversion. See lines 912-914.
 - Clarified the guidance on cut-off dates and references dates used to report natural ecosystem conversion. See lines 1021-1034.
- Added requirement 101-6-a-ii to report the conversion of intensively used or modified ecosystems. See lines 915-917.
- Revised requirement 101-6-b to report the type and quantity of natural resources exploited in two requirements, separating out the exploitation of wild species from the exploitation of water resources. See lines 918-921.
 - Removed the requirement to describe the processes used to monitor the direct drivers of biodiversity loss.

83 Disclosure 101-7 Changes to the state of biodiversity

- Revised requirement 101-7-a to clarify that ecosystem type and size are to be reported for the base year and ecosystem condition for the base year and the current reporting period. See lines 1123-1127.
- Changed the requirement to report the name and extinction risk of affected or potentially
 affected species to a reporting option. This can be used for the recommendation to report
 information on affected or potentially affected species. See lines 1235-1244.
- Removed the requirement to report the condition of ecosystems that are or could be affected by suppliers' activities.
- Clarified in the guidance that it may not always be possible to attribute how much of the
 change in the state of biodiversity is due to a specific organization but that the information
 reported helps to understand the organization's impacts on biodiversity and can inform the
 management of these impacts. See lines 1138-1143.
- 96 Clarified the guidance on how to report baseline information and ecosystem condition. See
 97 lines 1164-1167 and lines 1195-1216.



74

75

81

82

98 **Disclosure 101-8 Ecosystem services**

- 99 Revised the disclosure to focus on reporting the ecosystem services that are or could be ٠ 100 affected as a result of the organization's most significant impacts, rather than reporting the significant ecosystem services. See lines 1263-1264. 101
- Removed the requirement to report the ecosystem services and beneficiaries that are or 102 • could be affected by suppliers' activities. 103
- Added a recommendation to describe the approach used to identify the ecosystem services 104 • 105 reported and guidance on how to identify ecosystem services. See lines 1304-1305 and 106 lines 1305-1312.

107 Glossary

Removed the term 'natural ecosystem conversion' that was proposed in the Biodiversity 108 • Standard exposure draft. The term is defined in the guidance instead. See lines 1017-1020. 109

110 Appendix

- Added tables to provide additional guidance to Disclosures 101-4, 101-5, and 101-7. See 111 • 112 Table 1 and Table 2 in the Appendix.
- 113 Consolidated template tables to present information reported under Disclosures 101-5, 101-• 6, 101-7, and 101-8. See Table 3 and Table 4 in the Appendix. 114
- ve c this document does not represent an officir 115 Other editorial revisions have been made to the text to improve clarity and consistency with the GRI
- 116



117 GRI 101: Biodiversity 2024

This document does not represent an official position of the cases

118EFFECTIVE DATE: 1 January 2026

119 **TOPIC STANDARD**



120 **GRI 101: Biodiversity 2024**

121 TOPIC STANDARD

122 Effective Date

123 This Standard is effective for reports or other materials published on or after 1 January 2026.

124 Responsibility

125 This Standard is issued by the Global Sustainability Standards Board (GSSB). Any feedback on the 126 GRI Standards can be submitted to gssbsecretariat@globalreporting.org for the consideration of the

127 GSSB.

128 Due Process

129 This Standard was developed in the public interest and in accordance with the requirements of the

- 130 GSSB Due Process Protocol. It has been developed using multi-stakeholder expertise, and with
- regard to authoritative intergovernmental instruments and widely held expectations of organizations
- relating to social, environmental, and economic responsibilities.

133 Legal Liability

- 134 This document, designed to promote sustainability reporting, has been developed by the Global
- 135 Sustainability Standards Board (GSSB) through a unique multi-stakeholder consultative process
- 136 involving representatives from organizations and report information users from around the world.
- While the GRI Board of Directors and GSSB encourage the use of the GRI Sustainability Reporting
 Standards (GRI Standards) and related Interpretations by all organizations, the preparation and
- publication of reports based fully or partially on the GRI Standards and related Interpretations are the
- full responsibility of those producing them. Neither the GRI Board of Directors, GSSB, nor Stichting
- 141 Global Reporting Initiative (GRI) can assume responsibility for any consequences or damages
- resulting directly or indirectly from the use of the GRI Standards and related Interpretations in the
- preparation of reports, or the use of reports based on the GRI Standards and related Interpretations.

144 Copyright and trademark notice

- 145 This document is copyright-protected by Stichting Global Reporting Initiative (GRI). The reproduction
- and distribution of this document for information and/or use in preparing a sustainability report is
- 147 permitted without prior permission from GRI. However, neither this document nor any extract from it
- may be reproduced, stored, translated, or transferred in any form or by any means (electronic,
- 149 mechanical, photocopied, recorded, or otherwise) for any other purpose without prior written
- 150 permission from GRI.
- Global Reporting Initiative, GRI and logo, GSSB and logo, and GRI Sustainability Reporting
 Standards (GRI Standards) and logo are trademarks of Stichting Global Reporting Initiative.
- 153 © 2024 GRI. All rights reserved.
- 154 ISBN 978-90-8866-NNN-N



155 **Content**

156	Introduction	8
157	Background on the topic	
158	System of GRI Standards	
159	Using this Standard	10
160	1. Topic management disclosures	11
161	Disclosure 101-1 Policies to halt and reverse biodiversity loss	
162	Disclosure 101-2 Management of biodiversity impacts	
163	Disclosure 101-3 Access and benefit-sharing	
164	2. Topic disclosures	20
165	Disclosure 101-4 Identification of biodiversity impacts	
166	Disclosure 101-5 Locations with biodiversity impacts	
167	Disclosure 101-6 Direct drivers of biodiversity loss	
168	Disclosure 101-7 Changes to the state of biodiversity	
169	Disclosure 101-8 Ecosystem services	
170	Glossary	
171	Bibliography	
	whis document does not represe.	

GSSB

Introduction 173

- 174 GRI 101: Biodiversity 2024 contains disclosures for organizations to report information about their 175 biodiversity-related impacts, and how they manage these impacts.
- 176 The Standard is structured as follows:
- Section 1 contains three disclosures, which provide information about how the organization 177 manages its biodiversity-related impacts. 178
- Section 2 contains five disclosures, which provide information about the organization's 179 180 biodiversity-related impacts.
- The Glossary contains defined terms with a specific meaning when used in the GRI 181 Standards. The terms are underlined in the text of the GRI Standards and linked to the 182 183 definitions.
- The Bibliography lists authoritative intergovernmental instruments and additional references 184 used in developing this Standard, as well as resources that the organization can consult. 185

186 The rest of the Introduction section provides a background on the topic, an overview of the system of 187 GRI Standards and further information on using this Standard.

Background on the topic 188

- 189 This Standard addresses the topic of biodiversity.
- Biodiversity encompasses the variability of organisms living in terrestrial, marine, and aquatic 190
- 191 ecosystems, as well as the ecological complexes they form. It comprises the genetic diversity within
- species, the variety of species in an area, and the distinct features of entire ecosystems. Biodiversity 192
- is an essential characteristic of nature, which comprises all living and non-living elements on Earth. 193
- 194 The activities of an organization can exacerbate the direct drivers of biodiversity loss, such as land
- 195 and sea use change, exploitation of natural resources, climate change, pollution, and the
- 196 introduction of invasive alien species. Direct drivers have impacts on species and ecosystems while 197 affecting people who rely on ecosystem services for their livelihood.
- 198 An organization can have impacts on biodiversity through its activities, the activities of its business relationships, or a combination of both. These impacts can also extend beyond the geographic 199 200 locations of the organization's activities.
- 201 The Kunming-Montreal Global Biodiversity Framework of the Convention on Biological Diversity sets
- 202 goals and targets to halt and reverse the continued loss of biodiversity. The UN adopted the
- 203 Sustainable Development Goals (SDG) as part of the 2030 Agenda for Sustainable Development.
- These goals include key targets for halting biodiversity loss and promoting the sustainable use of 204
- 205 natural resources under SDG 14: Life below water and SDG 15: Life on land.
- 206 See references [2] and [3] Bibliography.

System of GRI Standards 207

This Standard is part of the GRI Sustainability Reporting Standards (GRI Standards). The GRI 208

209 Standards enable an organization to report information about its most significant impacts on the 210 economy, environment, and people, including impacts on their human rights, and how it manages these impacts. 211

- 212 The GRI Standards are structured as a system of interrelated standards that are organized into three
- 213 series: GRI Universal Standards, GRI Sector Standards, and GRI Topic Standards (see Figure 1 in
- 214 this Standard).



215 Universal Standards: GRI 1, GRI 2 and GRI 3

216 *GRI 1: Foundation 2021* specifies the requirements that the organization must comply with to report 217 in accordance with the GRI Standards. The organization begins using the GRI Standards by

consulting *GRI 1*.

219 *GRI 2: General Disclosures 2021* contains disclosures that the organization uses to provide 220 information about its reporting practices and other organizational details, such as its activities,

221 governance, and policies.

GRI 3: Material Topics 2021 provides guidance on how to determine <u>material topics</u>. It also contains disclosures that the organization uses to report information about its process of determining material topics, its list of material topics, and how it manages each topic.

225 Sector Standards

The Sector Standards provide information for organizations about their likely material topics. The organization uses the Sector Standards that apply to its sectors when determining its material topics and when determining what to report for each material topic.

229 **Topic Standards**

- 230 The Topic Standards contain disclosures that the organization uses to report information about its
- impacts in relation to particular topics. The organization uses the Topic Standards according to the list of material topics it has determined using *GRI* 3.

233 Figure 1. GRI Standards: Universal, Sector and Topic Standards





234 Using this Standard

This Standard can be used by any organization – regardless of size, type, sector, geographic location, or reporting experience – to report information about its biodiversity-related <u>impacts</u>. In addition to this Standard, disclosures that relate to this topic can be found in *GRI 303: Water and Effluents 2018, GRI 305: Emissions 2016, GRI 306: Effluents and Waste 2016* (Disclosure 306-3 Significant spills), *GRI 411: Rights of Indigenous Peoples 2016*, and *GRI 413: Local Communities 2016*.

- An organization reporting in accordance with the GRI Standards is required to report the following disclosures if it has determined biodiversity to be a <u>material topic</u>:
- Disclosure 3-3 in *GRI 3: Material Topics 2021*.
- Any disclosures from this Topic Standard that are relevant to the organization's biodiversityrelated impacts (Disclosure 101-1 through Disclosure 101-8).
- 246 See Requirements 4 and 5 in *GRI 1: Foundation 2021*.
- 247 Reasons for omission are permitted for these disclosures.
- 248 If the organization cannot comply with a disclosure or with a requirement in a disclosure (e.g.,
- because the required information is confidential or subject to legal prohibitions), the organization is

required to specify the disclosure or the requirement it cannot comply with, and provide a reason for

- omission together with an explanation in the GRI content index. See Requirement 6 in *GRI 1* for
- 252 more information on reasons for omission.
- If the organization cannot report the required information about an item specified in a disclosure because the item (e.g., committee, policy, practice, process) does not exist, it can comply with the requirement by reporting this to be the case. The organization can explain the reasons for not having this item, or describe any plans to develop it. The disclosure does not require the organization to implement the item (e.g., developing a policy), but to report that the item does not exist.
- If the organization intends to publish a standalone sustainability report, it does not need to repeat information that it has already reported publicly elsewhere, such as on web pages or in its annual report. In such a case, the organization can report a required disclosure by providing a reference in the GRI content index as to where this information can be found (e.g., by providing a link to the web page or citing the page in the annual report where the information has been published).

263 Requirements, guidance and defined terms

- 264 The following apply throughout this Standard:
- Requirements are presented in **bold font** and indicated by the word 'shall'. An organization must comply with requirements to report in accordance with the GRI Standards.
- 267 Requirements may be accompanied by guidance.
- 268 Guidance includes background information, explanations, and examples to help the organization 269 better understand the requirements. The organization is not required to comply with guidance.
- The Standards may also include recommendations. These are cases where a particular course of action is encouraged but not required.
- 272 The word 'should' indicates a recommendation, and the word 'can' indicates a possibility or option.
- 273 Defined terms are <u>underlined</u> in the text of the GRI Standards and linked to their definitions in the 274 Glossary. The organization is required to apply the definitions in the Glossary.



1. Topic management disclosures 275

276 An organization reporting in accordance with the GRI Standards is required to report how it manages 277 each of its material topics.

278 An organization that has determined biodiversity to be a material topic is required to report how it manages the topic using Disclosure 3-3 in GRI 3: Material Topics 2021. The organization is also 279 required to report any disclosures from this section (Disclosure 101-1 through Disclosure 101-3) that 280 281 are relevant to its biodiversity-related impacts.

282 This section is therefore designed to supplement - and not replace - Disclosure 3-3 in GRI 3.

Disclosure 101-1 Policies to halt and reverse 283 in of the biodiversity loss 284

285 REQUIREMENTS

- 286 The organization shall:
- a. describe its policies or commitments to halt and reverse biodiversity loss, and how these 287 are informed by the 2050 Goals and 2030 Targets in the Kunming-Montreal Global 288 **Biodiversity Framework;** 289
- 290 b. report the extent to which these policies or commitments apply to the organization's activities and to its business relationships; 291
- c. report the goals and targets to halt and reverse biodiversity loss, whether they are 292 293 informed by scientific consensus, the base year, and the indicators used to evaluate 294 progress.

GUIDANCE 295

305

306

307

- The Convention on Biological Diversity adopted the Kunming-Montreal Global Biodiversity 296
- 297 Framework (hereafter the Global Biodiversity Framework). The Global Biodiversity Framework lays out its 2050 vision of a world 'living in harmony with nature' where 'biodiversity is valued, conserved, 298 restored and wisely used, maintaining ecosystem services, sustaining a healthy planet and 299 300 delivering benefits essential for all people'.
- 301 The Global Biodiversity Framework recognizes the need to reduce or reverse the drivers of biodiversity loss. The framework proposes the 2050 Goals, together with the related 2030 Targets. 302 The goals with the related targets are designed to stimulate efforts in three key areas: 303
- 304 reducing the threats to biodiversity;
 - meeting people's needs through sustainable use and benefit-sharing; and •
 - providing tools and solutions for implementing and integrating practices that conserve and sustainably use biodiversity.
- 308 See reference [3] in the Bibliography.

309 Guidance to 101-1-a

- 310 The organization can provide a high-level description of its policies or commitments to halt and 311 reverse biodiversity loss. For example, the organization can describe that it has implemented a 312 policy in line with Target 5 of the Global Biodiversity Framework to source from suppliers that take
- 313 appropriate measures to prevent exporting species that are alien and invasive to the buying country.
- 314 If the policies or commitments to halt and reverse biodiversity loss are not informed by the 2050
- 315 Goals and 2030 Targets in the Global Biodiversity Framework, a brief statement of this fact is
- sufficient to comply with the requirement. The organization can explain if it intends to do so and, if 316 317 so, by which timeframe.
- 318 If the organization has described its policies or commitments to halt and reverse biodiversity loss under Disclosure 2-23 in GRI 2: General Disclosures 2021 or under 3-3-c in GRI 3: Material Topics 319



320 *2021*, it can provide a reference to this information under 101-1-a and does not need to repeat the information.

322 Guidance to 101-1-b

323 If the policies or commitments apply to all of the organization's activities and <u>business relationships</u> 324 equally, a brief statement of this fact is sufficient to comply with the requirement.

325 If the policies or commitments apply to only some of the organization's activities (e.g., they apply

only to entities located in certain countries or to certain subsidiaries) or to some of its business

relationships (e.g., they apply only to suppliers), then the organization should report to which

- 328 activities and business relationships the policies or commitments apply. It can also explain why the 329 policies or commitments are limited to these activities and business relationships.
- 330 The organization should also explain whether its business relationships are obligated to abide by the
- policies or commitments, or are encouraged (but not obligated) to do so. When its business
- relationships are encouraged to abide by the policies or commitments, the organization can describe how it encourages adoption and what incentives or support it provides.

334 Guidance to 101-1-c

- To halt and reverse biodiversity loss, the organization may have goals and targets to achieve net
- 336 positive impact, no net loss and net gain of biodiversity, or to contribute to nature positive goals. In 337 such a case, the organization should explain how it has defined these concepts and list the sources
- 338 used to inform its definition.
- 339 When reporting on goals and targets, the organization should report how the goals and targets are
- 340 set. For example, it can use the *Science Based Targets Network (SBTN) Target-Setting Tools and*
- 341 *Guidance* [39] or the SBTN and the Taskforce on Nature-related Financial Disclosures (TNFD) 342 *Guidance* for corporates on science-based targets for nature [40]
- 342 Guidance for corporates on science-based targets for nature [40].

343 The organization should report how scientific consensus informed its goals and targets. For

- example, it can use national biodiversity strategies and action plans developed in the context of the
 Convention on Biological Diversity, or independent assessments of the ecological status of an area.
- 346 The organization should also report the <u>baseline</u> for the goals and targets and the timeline for 347 achieving the goals and targets.
- 348 When reporting progress toward the goals and targets and assessing if the progress is satisfactory,
- 349 the organization can, for example, report that it sourced 60% of deforestation-free products in 2023.
- 350 It can further report that it is on track to achieve its target of sourcing 100% deforestation-free 351 products by 31 December 2030.
- 352 See reference [39] and [40] in the Bibliography.

This document



Disclosure 101-2 Management of biodiversity

354 impacts

- 355 **REQUIREMENTS**
- 356 **The organization shall:**
- 357 a. report how it applies the mitigation hierarchy by describing:
- 358 i. actions taken to avoid negative impacts on biodiversity;
- 359 ii. actions taken to minimize negative impacts on biodiversity that were not avoided;
- iii. actions taken to restore and rehabilitate affected ecosystems, including the goals of
 the restoration and rehabilitation, and how <u>stakeholders</u> are engaged throughout the
 restoration and rehabilitation actions;
- 363 iv. actions taken to offset residual negative impacts on biodiversity;
- 364 v. transformative actions taken and additional conservation actions taken;
- b. with reference to 101-2-a-iii, report for each operational site with the most significant
 impacts on biodiversity:
- 367 i. the size in hectares of the area under restoration or rehabilitation;
- 368 ii. the size in hectares of the area restored or rehabilitated;
- 369 c. with reference to 101-2-a-iv, report for each offset:
- 370 i. the goals;
- 371 ii. the geographic location;
- 372 iii. whether and how principles of good offset practices are met;
- iv. whether and how the offsets are certified or verified by a third party;
- d. list which of its operational sites with the most significant impacts on biodiversity have a
 biodiversity management plan and explain why the other operational sites do not have a
 management plan;
- describe how it enhances synergies and reduces trade-offs between actions taken to
 manage its biodiversity and climate change impacts;
- describe how it ensures that the actions taken to manage its impacts on biodiversity
 avoid and minimize negative impacts and maximize positive impacts for stakeholders.

381 GUIDANCE

This disclosure provides information on the actions taken by the organization to manage its most significant <u>impacts</u> on biodiversity, including impacts in its <u>supply chain</u>. This disclosure covers the most significant impacts at the operational sites and for the products and services in the supply chain identified under <u>Disclosure 101-4</u>. The organization can manage its negative impacts by managing the contribution to the direct drivers of biodiversity loss reported under <u>Disclosure 101-6</u> (e.g., avoid pollution or minimize <u>greenhouse gas</u> emissions). The organization should also report actions taken to manage impacts downstream in its <u>value chain</u>.

389 Organizations are expected to apply the mitigation hierarchy to manage their negative impacts on 390 biodiversity and ecosystem services. The mitigation hierarchy consists of steps, including avoidance, 391 minimization, restoration and rehabilitation, and offset. An organization should prioritize actions to 392 avoid negative impacts and minimize those impacts when avoidance is not possible. Restoration and rehabilitation measures should be implemented when negative impacts cannot be avoided or 393 minimized. After applying all other measures, offsetting measures can also be applied to residual 394 negative impacts to achieve no net loss or net gain. Building on the mitigation hierarchy, the Science 395 396 Based Targets Network (SBTN) Initial Guidance for Business [37] includes an additional step to 397 cover transformative actions, which aim to change the socio-economic systems in which



organizations are embedded. Additional conservation actions can be taken to create a positive
 impact on biodiversity beyond the management of the organization's negative impacts.

400 For more information on the mitigation hierarchy, see the Cross Sector Biodiversity Initiative (CSBI),

- 401 A cross-sector guide for implementing the Mitigation Hierarchy [15] and the International Finance 402 Corporation (IFC), Performance Standard 6: Biodiversity Conservation and Sustainable
- 403 Management of Living Natural Resources [25].

This disclosure covers actions taken at an operational site level and at the organizational level (e.g., a ban on sourcing a certain product across the entire organization).

- 406 The organization should describe the traceability mechanisms it uses to identify the origin of
- 407 products and entities in its supply chain. The organization should also describe actions taken to
- 408 improve traceability. The organization should explain whether it sources products certified by a third
- 409 party and specify the certification schemes or standards used. Third-party certification can provide 410 information on whether the products sourced adhere to sustainable management practices. The
- 410 organization should explain how these certification schemes or standards help manage impacts on
- 412 biodiversity, as they use different criteria related to biodiversity conservation. The organization can
- 413 also report the percentage of certified products sourced.
- 414 The organization should describe how it works with its suppliers to manage their negative impacts on
- biodiversity, for example, by providing them with financial or technical support to change their
- 416 practices.
- The organization should describe how it works with other organizations and <u>stakeholders</u> to manage
- 418 cumulative impacts. For example, an organization can describe how it works with other
- 419 organizations and the <u>local community</u> to reduce their combined <u>water withdrawal</u> to mitigate the
- 420 negative impact on biodiversity. The organization's activities may facilitate other organizations and
- 421 stakeholders to cause impacts on biodiversity. In such a case, the organization should describe how 422 it works with other organizations and stakeholders to manage these impacts. For example, consider
- 423 an organization that has constructed an access road to a new operational site. This access road also
- 424 becomes a pathway to previously inaccessible areas for individuals engaged in hunting. In this
- 425 example, the organization can describe how it works with the government to limit the use of this
- 426 road.
- 427 Where applicable, the organization should also describe actions taken to ensure the conservation 428 and sustainable use of marine resources in areas beyond national jurisdictions.
- 429 See references [9], [15], [25] and [37] in the Bibliography.

430 Guidance to 101-2-a-i

- 431 Avoidance actions aim to anticipate and prevent negative <u>impacts</u> on biodiversity before actions or
- 432 decisions leading to such impacts are taken. Impacts can be avoided by finding alternative locations
- 433 for the activities (e.g., relocating the operational site), changing the timing of the activities (e.g.,
- timing activities when they do not interfere with a species' breeding or migration), or by deciding not
- to undertake activities when they generate irremediable biodiversity losses (e.g., deciding against
 expanding the operational site). Organizations are expected to prioritize avoidance as the primary
- 437 step in the mitigation hierarchy.
- The organization should explain if it avoids activities in or near ecologically sensitive areas, such as protected areas and Key Biodiversity Areas. See Disclosure 101-5 and Table 1 in the Appendix for more information on ecologically sensitive areas.
- 441 See references [7] and [15] in the Bibliography.

442 Guidance to 101-2-a-ii

- 443 Actions taken to minimize negative impacts on biodiversity aim to reduce the duration, intensity, and
- extent of impacts that cannot be completely avoided. The organization should explain why the impacts could not be avoided.
- 446 Examples of minimization measures include preventing the spread of invasive alien species,
- designing ecological corridors to minimize ecosystem fragmentation, or locating operational sites to
- 448 areas that are less sensitive to an organization's activities.



449 See references [11], [15] and [25] in the Bibliography.

450 Guidance to 101-2-a-iii

451 This requirement covers the actions taken to restore or rehabilitate ecosystems that are affected by 452 the organization's activities. Actions taken outside of the area affected by the organization's activities 453 are reported as offsets under 101-2-a-iv or as additional conservation actions under 101-2-a-v. 454 Restoration is the process of assisting the recovery of an ecosystem that has been degraded. damaged, or destroyed. Rehabilitation is the process of stabilizing the terrain, ensuring public safety, 455 enhancing aesthetics, and restoring the land to a purpose deemed useful within the regional context. 456 Actions taken to restore and rehabilitate affected ecosystems aim to return the environment to its 457 458 original state or to a state where it has a healthy and functioning ecosystem.

The organization should specify if the restoration and rehabilitation actions are implemented while the organization's activities are ongoing or after the activities have ended (e.g., restoration actions taken after the closure of an operational site). The organization should also report the stage of its restoration and rehabilitation actions. Examples of stages of restoration and rehabilitation are as follows:

- planning and design;
- implementation;
- monitoring, documentation, evaluation, and reporting;
- ongoing activities and maintenance.
- 468 The UN Decade on Ecosystem Restoration has identified principles that detail best practices for 469 restoring degraded land, freshwater, and marine ecosystems.
- The organization should provide information on the species and ecosystems targeted through the
 restoration and rehabilitation actions. The organization should also explain how these actions
 support species recovery.
- 473 When reporting on the goals of the restoration and rehabilitation, the organization can report to what extent the actions are proportional, viable, and measurable. 'Proportional' means that the area 474 475 targeted for restoration or rehabilitation is equivalent in size to the area that has been affected. 476 'Viable' means that no known constraints can hinder the successful implementation of the restoration or rehabilitation in the short, medium, and long term, and the set goals are attainable based on the 477 current ecological assessment results. An example of short, medium and long term restoration and 478 rehabilitation is that the land ownership is not limited in time. 'Measurable' means that objectives 479 have been defined and are regularly monitored. 480
- 481 Stakeholder engagement can include co-design, co-management, co-governance, and regular and 482 inclusive reporting and communication of activities.
- 483 Organizations are expected to obtain free, prior, and informed consent (FPIC) before and throughout
- restoration and rehabilitation activities that could have impacts on land or resources that <u>Indigenous</u>
 <u>Peoples</u> use or own. Organizations are also expected to seek FPIC when restoration and
- rehabilitation activities have impacts on land or resources that local communities use or own.
- 487 See references [8], [9] and [17] in the Bibliography.

488 Guidance to 101-2-a-iv

- 489 Offsets are management interventions in areas not affected by the organization's activities. These
- 490 can include the restoration or rehabilitation of degraded ecosystems or actions taken to halt and
 491 reverse biodiversity loss.
- 492 The organization should report the types of offsets used. Examples of biodiversity offsets include 493 averted loss, restoration, and one-off offsets.
- The organization should report the phases that the offset projects are in, for example, design,
 implementation, or completion. It should also report the delivery deadlines and the conservation
 goals.
- The organization should also report the co-benefits and trade-offs associated with the offsets, and how those trade-offs are managed. Examples of co-benefits include the capture and storage of
- 499 carbon and social or cultural benefits. An example of a trade-off would be replacing non-native trees



- 500 with native trees, while the local community preferred the non-native species for the purpose of 501 firewood.
- 502 See reference [55] in the Bibliography.

503 Guidance to 101-2-a-v

504 Transformative actions contribute to systemic change inside and outside the organization's <u>value</u>

- 505 <u>chain</u> to generate positive <u>impacts</u> on biodiversity. They address the drivers of biodiversity loss
- 506 through technological, economic, institutional, and social factors, emphasizing the importance of 507 underlying values and behavioral changes. Transformative actions can happen before, during, and
- 508 after other avoidance, minimization, restoration and rehabilitation, and offset actions. Transformative
- actions include actions taken with third parties (e.g., experts, governments, local communities), and
- 510 actions that enable other organizations to generate positive impacts on biodiversity.
- 511 The organization can describe how it ensures that its business model is compatible with the
- transition to halt and reverse biodiversity loss or the steps taken to transition to a circular economy.
- 513 The organization can also describe actions that advance the sustainable use of biodiversity, for
- 514 example, promoting farming practices that support biodiversity.
- 515 Additional conservation actions aim to have a positive impact on biodiversity and should not be used
- to manage the organization's negative impacts. They include actions taken to conserve or restore
- 517 biodiversity in collaboration with third parties, such as scientific experts, non-governmental
- 518 organizations, or local communities. For example, joint research projects, technical and scientific
- 519 cooperation, capacity-building, training, or knowledge sharing.
- 520 See reference [37] in the Bibliography.

521 Guidance to 101-2-b

- 522 Requirement 101-2-b provides information about the size of the area under restoration or
- 523 rehabilitation and the size of the area restored or rehabilitated for each operational site with the most 524 significant impacts on biodiversity. The operational sites with the most significant impacts are those
- 525 reported under 101-5-a. This information can be compared to the size of the ecosystem affected by
- 526 the organization's activities reported under 101-7-a-ii. It can also be compared to the size of the
- 527 operational site reported under 101-5-a. These comparisons provide insight into how much of the
- 528 affected area is under restoration and rehabilitation and how much has been restored and
- 529 rehabilitated.
- 530 See references [15] and [25] in the Bibliography.
- 531 Guidance to 101-2-c-i
- 532 An offset aims to deliver or contribute to no net loss or net gain goals for an operational site, a
- species, or other biodiversity features. The organization can report the delivered outcomes in the
 case an offset has been finalized.
- 535 The organization should report how the goal to achieve no net loss or net gain is demonstrated and 536 verified. The organization should provide information on the species and ecosystems targeted 537 through the actions to offset its residual negative impacts
- 537 through the actions to offset its residual negative impacts.
- 538 The organization can also report the residual negative impacts of its activities. It can apply a no net 539 loss and loss-gain calculation as described in the *Business and Biodiversity Offset Program (BBOP)* 540 *Resource Paper: No Net Loss and Loss-Gain Calculations in Biodiversity Offsets* [10].
- 541 See references [10], [15] and [55] in the Bibliography.

542 Guidance to 101-2-c-iii

- 543 The organization should explain whether it identifies, designs, and manages offsets according to
- applicable national legislation or principles of good offset practices, such as the BBOP Standard on
- 545 Biodiversity Offsets [11] or the International Union for Conservation of Nature (IUCN) Policy on 546 Biodiversity Offsets [11] The Organization for Conservation of Nature (IUCN) Policy on
- 546 Biodiversity Offsets [27]. The Organisation for Economic Cooperation and Development (OECD),
- 547 Biodiversity Offsets: Effective Design and Implementation [33] also provides lessons learned and
- 548 insights on good practices, such as additionality, ecological equivalence, and permanence.



- 549 'Additionality' is a property of a biodiversity offset, where the conservation outcomes are
- 550 demonstrably new and additional and would not have resulted without the offset (e.g., weed control
- 551 measures required by legislation cannot contribute to an offset). As no two areas are ecologically
- identical, 'ecological equivalence' means that the biodiversity gains from the offset must be
- 553 equivalent to the residual impacts. 'Permanence' means that the offsets must provide biodiversity
- gains that correspond to the duration of the biodiversity loss from the residual impacts.
- 555 See references [11], [27] and [33] in the Bibliography.

556 Guidance to 101-2-d

557 Requirement 101-2-d provides information about which operational sites with the most significant 558 <u>impacts</u> on biodiversity have a biodiversity management plan. The operational sites with the most 559 significant impacts are those reported under 101-5-a.

- 560 A biodiversity management plan describes how the actions to manage biodiversity impacts are
- 561 implemented within a particular operational site. It includes a monitoring plan, a time schedule, 562 milestones, and targets. The plans to manage biodiversity impacts may be integrated into broader
- 563 site environmental management plans.

564 Guidance to 101-2-e

- 565 Synergies include actions taken to protect biodiversity that contribute to climate change mitigation or
- adaptation. Actions can also improve the capacity of species or ecosystems to adapt to unavoidable
- 567 climate change impacts. For example, planting mangroves can protect biodiversity by increasing the
- 568 wildlife population and contribute to climate change mitigation and adaptation by capturing and
- 569 storing carbon and controlling floods.
- 570 In contrast, trade-offs include climate change mitigation or adaptation actions that result in
- 571 biodiversity loss. For example, foresting an area with non-native species may contribute to climate
- 572 change mitigation and adaptation by absorbing greenhouse gases and controlling erosion. However,
- 573 it may also result in the loss of biodiversity and ecosystem services that flow from the affected 574 ecosystems.
- 575 If the organization does not enhance synergies or reduce trade-offs between actions taken to
- 576 manage its biodiversity and climate change impacts, a brief statement of this fact is sufficient to
- 577 comply with the requirement.

578 Guidance to 101-2-f

- 579 Actions taken to manage impacts on biodiversity may lead to negative impacts on <u>stakeholders</u>. For 580 example, when an organization's offset measures form a new protected area restricting the <u>local</u> 581 <u>community</u> from using the area and accessing natural resources.
- The organization should report which stakeholders are affected or potentially affected and explain 582 583 how it identifies, addresses, and monitors the negative and positive impacts on stakeholders. The organization should explain how it engages with stakeholders to identify and avoid negative impacts 584 that are considered unacceptable and cannot be mitigated or compensated for. It should also 585 586 describe the actions taken to achieve equitable social outcomes. For example, a privately owned protected area invests part of its revenue from tourism in local energy and healthcare projects, but it 587 restricts local communities from utilizing the land for agricultural purposes. The organization should 588 589 also explain how it engages with stakeholders and describe any conflict resolution or grievance 590 mechanisms it has implemented. For more information on good practice principles to generate 591 positive social outcomes while mitigating biodiversity impacts, see reference [8] in the Bibliography.



Disclosure 101-3 Access and benefit-sharing 592

REQUIREMENTS 593

- 594 The organization shall:
- 595 a. describe the process to ensure compliance with access and benefit-sharing regulations 596 and measures;

597 b. describe voluntary actions taken to advance access and benefit-sharing that are additional to legal obligations or when there are no regulations and measures. 598

599 **GUIDANCE**

This disclosure provides information on how the organization complies with access and benefit-600 601 sharing (ABS) regulations and measures regarding access genetic resources and associated 602 traditional knowledge held by Indigenous Peoples and local communities. These regulations and 603 measures also establish the rules on fair and equitable benefit-sharing arising from the utilization of 604 genetic resources and the associated traditional knowledge. It also provides information on the 605 voluntary actions taken by the organization to advance access and fair and equitable benefit-606 sharing.

- 607 This disclosure is relevant for organizations that use genetic resources to conduct research and
- 608 development on the genetic or biochemical composition of resources, including through the
- application of biotechnology. It also applies to organizations that use traditional knowledge 609
- 610 associated with genetic resources. These organizations are active in cosmetics, pharmaceuticals,
- 611 and agriculture, among other sectors.
- 612 The fair and equitable sharing of benefits arising from the utilization of genetic resources is one of
- the objectives of the Convention on Biological Diversity's. The Nagoya Protocol on Access to 613
- Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization 614 (hereafter the Nagoya Protocol) further advances this objective. 615
- 616 The organization can consult the ABS Clearing-House [13] for more information on ABS. The
- 617 platform intends to provide information on national regulations and measures for accessing genetic
- 618 resources and associated traditional knowledge. In addition, national focal points might be
- established to provide information on ABS on the national level. 619
- 620 When countries lack ABS regulations and measures, an organization can still take action to share the benefits arising from its use of genetic resources and associated traditional knowledge fairly and 621 622 equitably. These actions are referred to as voluntary actions.
- 623 The Nagoya Protocol does not cover ABS of genetic resources and associated traditional knowledge 624 found in areas of the sea that are beyond national jurisdiction. Under the UN Convention on the Law 625 of the Sea an agreement has been adopted to conserve and sustain marine biological diversity in 626 areas beyond national jurisdiction. This agreement covers access and benefit-sharing of marine 627 genetic resources, including the digital genetic sequence information of resources located in areas 628 beyond national jurisdiction. If an organization has activities on the sea beyond national jurisdiction, 629 it can report if it implements processes and actions to ensure access and fair and equitable benefit sharing of marine genetic resources. 630
- 631 See references [1], [2], [4] and [13] in the Bibliography.
- 632 Guidance to 101-3-a

634

635 636

637

638 639

- 633 Where ABS regulations and measures apply, the organization should describe:
 - how it allocates responsibility to ensure compliance with ABS regulations and measures across different levels within the organization;
 - how the organization identifies which provider countries have access and benefit-sharing regulations and measures;
 - how it integrates ABS regulations and measures into organizational strategies, operational policies, and operational procedures; and
- what training the organization provides on implementing the ABS regulations and 640 641 measures.



- When the organization has identified significant instances of non-compliance with laws and 642
- regulations related to ABS, these are reported under Disclosure 2-27 in GRI 2: General Disclosures 643 644 2021.

645 Guidance to 101-3-b

646 Examples of voluntary actions include joint research projects, training, or knowledge sharing related

647 to using genetic resources or associated traditional knowledge in research and innovation. The ABS

- Clearing-House [13] includes examples of good practices, codes of conduct, guidelines, and 648 standards. The United Nations (UN), Nagoya Protocol [4] lists examples of monetary and non-649
- monetary benefits, which can inform the organization's voluntary actions. 650
- 651 The organization can report how engagement with stakeholders, particularly Indigenous Peoples
- 652 and local communities, has informed its voluntary actions.
- einement internationalistics of the the second and If the organization has not taken any voluntary actions to advance access and fair and equitable 653 654
- 655



2. Topic disclosures

An organization reporting in accordance with the GRI Standards is required to report any disclosures from this section (Disclosure 101-4 through Disclosure 101-8) that are relevant to its biodiversityrelated <u>impacts</u>.

Disclosure 101-4 Identification of biodiversity

661 impacts

- 662 **REQUIREMENTS**
- 663 The organization shall:
- a. explain how it has determined which of its operational sites and which products and
 services in its supply chain have the most significant actual and potential impacts on
 biodiversity.

667 GUIDANCE

668 This disclosure enables the organization to explain how it has determined which of its operational

sites and which products and services in its supply chain have the most significant actual and

potential impacts on biodiversity. It covers products and services from <u>suppliers</u> throughout the

671 organization's supply chain, including from suppliers beyond the first tier. This provides an 672 understanding of where in the supply chain, potentially many tiers removed from the organization

understanding of where in the supply chain, potentially many tiers removed from the organization,the most significant impacts on biodiversity are. The organization can additionally report the

- 674 information for entities downstream in its value chain.
- 675 The activities undertaken by the organization in its operational sites can have impacts on
- biodiversity. Operational sites include sites owned, leased, or managed by the organization and
- 677 locations where it conducts its activities. Examples are a mining site owned by an organization or a
- fishing ground where an organization operates. Operational sites also include those for which future
- operations have been announced but not yet started, as well as those no longer active. Examples
- are a mining site owned by an organization or a fishing ground where an organization operates.
- 681 Operational sites include subsurface infrastructures under the land or seabed surface, such as
- 682 underground mining tunnels, cables, and pipelines.

683 The organization may also be involved with negative impacts on biodiversity as a result of its

- 684 <u>business relationships</u> with suppliers. Suppliers are entities upstream from the organization, which
- provide products or services used to develop the organization's own products or services. The
- activities undertaken by the suppliers to develop their products or services can have impacts on
- biodiversity. Suppliers that provide products to the organization can provide raw materials, semi-
- 688 manufactured goods, or final products.

689 Guidance to 101-4-a

690 The organization should describe the methods used and the assumptions made to determine which 691 of its operational sites and which products and services in its supply chain have the most significant 692 actual and potential impacts on biodiversity. See Box 1 for more information on how to identify the 693 most significant impacts on biodiversity.

It is up to the organization to set the threshold to determine which operational sites and which products and services in its supply chain have the most significant impacts on biodiversity. For example, the organization can determine that all of its operational sites have the most significant impacts on biodiversity, except for its headquarters. An organization that sources many products or services can determine to prioritize the products or services in its supply chain that are likely to have the most significant impacts on biodiversity and of which it sources a high volume or on which it spends a large amount.

The organization should describe any limitations or exclusions, for example, whether it has excluded
 certain parts of its supply chain when identifying the impacts.



The organization should describe the sources and the evidence it has used to identify the impacts. It should also explain whether and how it engages with <u>stakeholders</u> to identify impacts on biodiversity.

705 The organization should explain which information draws on primary, secondary, or modeled data.

- When reporting secondary or modeled data, the organization should report which datasets it has used and if it plans to improve the accuracy of data.
- 708 **Box 1. Most significant impacts on biodiversity**

709 Locating where impacts are most likely to be present and significant

710 Scoping

711 The organization should identify impacts on biodiversity across its operational sites, and products 712 and services in its supply chain. In some cases, the organization might be unable to identify actual 713 and potential negative impacts across all its operational sites, and products and services in its 714 supply chain. This could be, for example, because the organization has diverse or multiple global operations or because its supply chain comprises many entities. In such cases, the organization may 715 716 carry out an initial assessment or scoping exercise to identify general areas across its operational 717 sites and products and services in its supply chain (e.g., product lines, suppliers located in specific 718 geographic locations) where negative impacts are most likely to be present and significant.

719 Once the organization has conducted the initial assessment or scoping exercise, it can identify and assess actual and potential negative impacts for these general areas.

Activities undertaken by organizations lead to direct drivers of biodiversity loss (hereafter direct drivers). These direct drivers can in turn lead to impacts on biodiversity and related ecosystem
 services. To identify which activities in its operations and supply chain are likely to have the most significant impacts on biodiversity, the organization can use the following:

- The ENCORE tool and the SBTN Materiality Screening Tool¹ provide ratings of materiality for direct drivers associated with different activities.
- The SBTN High Impact Commodity List² shows the direct drivers commonly associated with the production of the high-impact commodities on the list.

The organization can also prioritize products that are or contain threatened species listed in the
 IUCN Red List of Threatened Species or species listed in the Convention on International Trade in
 Endangered Species of Wild Fauna and Flora (CITES) Appendices³.

732 **Geographic location**

Activities that occur in different geographic locations can have different impacts on biodiversity,
depending on factors such as the sensitivity of the local ecosystem, the presence of threatened
species, or people's reliance on a natural resource. Information on the location of the organization's
operational sites, and its suppliers' activities and their proximity to ecologically sensitive areas, helps
understand where these activities could be particularly harmful to biodiversity.

The organization should assess which of its operational sites are in or near ecologically sensitive
areas. If the organization has information about the location of its suppliers, it can also assess which
of those suppliers are in or near ecologically sensitive areas. See Disclosure 101-5 and Table 1 in
the Appendix for more information on ecologically sensitive areas.

742The organization can refer to the Scoping and Locate phase of the Taskforce on Nature-related743Financial Disclosures (TNFD) Guidance on the identification and assessment of nature-related

³ Species+ contains information on all species that are listed in the CITES Appendices [52].



¹ The scores generated by the SBTN Materiality Screening Tool are calculated using the ENCORE impact materiality database. The scores reflect a high-level understanding of impacts at a global or non-spatially explicit level and are expressed as a sectoral average or typical impact profile of an organization in the given sector.

² SBTN defines high-impact commodities as raw and value-added materials used in economic activities that are known to have material links to the key drivers of biodiversity loss, resource depletion, and ecosystem degradation.

issues: The LEAP approach [41] for more guidance on locating where impacts are most likely to be
 present and significant.

746 Identification of the most significant impacts

To identify and assess the significance of its <u>impacts</u> on biodiversity, the organization should identify
and measure the direct drivers associated with the activities in its operations and its <u>supply chain</u>, as
well as identify and measure the changes to the state of biodiversity. It can also identify changes in
the provision of ecosystem services.

If no primary data is available, the organization can estimate the direct drivers and changes to the
state of biodiversity. The indicators in Disclosure 101-6 can be used to measure the direct drivers
(e.g., the size of the natural ecosystem converted, or the quantity of the pollutants generated). See
Disclosures 101-7 for more information on changes to the state of biodiversity.

- To determine which of the impacts are most significant, the organization should assess the <u>severity</u>
 and likelihood of the impacts. The severity of a negative impact is determined by the following
 characteristics:
 - Scale: how grave the impact is.

758

774

775

776

777

778

- Scope: how widespread the impact is, for example, the number of species affected or the extent of ecosystem damage.
- Irremediable character: how hard it is to counteract or make good the resulting harm.
- Any of the three characteristics (scale, scope, and irremediable character) can make an impactsevere.
- 764 The contribution to the direct drivers, the proximity to ecologically sensitive areas, and the changes 765 to the state of biodiversity can make the severity and likelihood of an impact on biodiversity greater. 766 For example, when an operational site or <u>supplier</u> is in or near an ecologically sensitive area, it can 767 increase the likelihood of an impact on biodiversity. When an operational site or supplier is in or near 768 an ecosystem close to a tipping point, or where threatened species are present, it can increase the 769 severity of an impact on biodiversity, for example, because the impact would result in irremediable 770 harm.

See section 1 in *GRI 3: Material Topics 2021* for more guidance on assessing the significance of impacts. For more guidance on how to identify biodiversity impacts, the organization can use the following sources:

- Aligning accounting approaches for nature (Align) Recommendations and implementation guidance;
- Natural Capital Protocol from the Natural Capital Coalition;
- Science Based Targets Network (SBTN) Technical Guidance: Step 1: Assess;
- The Evaluate phase of the TNFD LEAP approach.

779 Methodologies

780 Where possible, the organization should use primary data to identify its operational sites and
781 products and services in its supply chain with the most significant impacts on biodiversity (e.g., using
782 data collected through field or supplier surveys or derived from satellite imagery).

783 The organization can use secondary or modeled data when primary data is unavailable (e.g., data layers on ecosystem extent and condition, life cycle impact assessments). For example, the 784 organization can use secondary data to identify and measure changes to the state of biodiversity. In 785 786 such a case, geospatial data layers can be overlaid with geographic location data to reflect the size 787 and condition of ecosystems or identify species that may be present at specific sites. For example, 788 the WWF Biodiversity Risk Filter⁴ [57] provides information on the ecosystem condition in different locations and the direct drivers most likely to be present and significant for an organization's or its 789 suppliers' activities. 790

⁴ The WWF Biodiversity Risk Filter includes over 50 global datasets on biodiversity, which provide information on a sector's potential contributions to direct drivers of biodiversity loss, proximity to ecologically sensitive areas, and the state of biodiversity (species and ecosystems).



- 791 Secondary data may be appropriate to gain initial information about an organization's impacts on
 792 biodiversity across its operational sites and products and services in its supply chain. Once the
 793 operational sites and products and services in its supply chain with the most significant impacts have
 794 been identified, the organization may collect primary data for those operational sites and products
 795 and services in its supply chain.
- The organization should use precise locations to assess the proximity to ecologically sensitive areas
 and to assess the changes to the state of biodiversity.
- For products and services in its supply chain, the organization can use sourcing regions or countries if it does not know the precise locations of its suppliers. The organization can also use life cycle assessment tools, pressure or impact assessment tools, and global trade datasets to make assumptions about likely locations, which are usually countries associated with its supply chain (e.g., the soy used in its products is likely to come from the United States, Brazil, or Argentina).
- The organization can use the data it has collected on the direct drivers, the proximity to ecologically sensitive areas, and the changes to the state of biodiversity to identify its impacts on biodiversity for reporting the information required under Disclosures 101-5 to 101-8.
- See references [14], [20], [26], [32], [36], [38], [41], [48], [49], [51] and [57] in the Bibliography.



Disclosure 101-5 Locations with biodiversity 807

impacts 808

- 809 REQUIREMENTS
- 810 The organization shall:
- a. report the location and size in hectares of its operational sites with the most significant 811 impacts on biodiversity; 812
- b. for each operational site reported under 101-5-a, report whether it is in or near an 813 of the GSS ecologically sensitive area, the distance to these areas, and whether these are: 814
- areas of biodiversity importance; 815 i.
- ii. areas of high ecosystem integrity; 816
- iii. areas of rapid decline in ecosystem integrity; 817
- 818 iv. areas of high physical water risks;
- v. areas important for the delivery of ecosystem service benefits to stakeholders; 819
- 820 c. report the activities that take place in each operational site reported under 101-5-a;
- d. report the products and services in its supply chain with the most significant impacts on 821 biodiversity and the countries or jurisdictions where the activities associated with these 822 823 products and services take place.

824 **GUIDANCE**

- This disclosure provides information about the locations of the organization's operational sites with 825
- the most significant impacts on biodiversity. It also provides information on the location of the 826
- 827 activities associated with the products and services in its supply chain with the most significant
- impacts on biodiversity. The operational sites and products and services with the most significant 828
- impacts on biodiversity are identified under Disclosure 101-4. These operational sites and products 829 and services are the focus of Disclosure 101-2 and Disclosures 101-5 to 101-8 of this Standard. 830
- If available, the organization can additionally report the information for entities downstream in its 831 832 value chain with the most significant impacts on biodiversity.
- 833 For an example of how to present information on requirements in Disclosure 101-5, see Tables 3 and 4 in the Appendix. 834

835 Guidance to 101-5-a

- The organization should use polygon outlines or maps to report on the location of its operational 836 837 sites with the most significant impacts on biodiversity. A polygon is a geographic feature defined by a 838 series of grid references, points, or vertices connected to form an enclosed shape. If available, the organization can also report the names and coordinates of its operational sites. 839
- 840 Providing the coordinates for the operational sites of transport and fishing activities may not be possible. In these cases, the organization can report departure and arrival locations and transport 841 routes for transport activities. For fishing activities, it can report FAO major fishing areas and 842 843 subareas.
- 844 See reference [18] in the Bibliography.

845 Guidance to 101-5-b

846 The Taskforce on Nature-related Financial Disclosures (TNFD) defines ecologically sensitive areas as areas of biodiversity importance, areas of high ecosystem integrity, areas of rapid decline in 847 848 ecosystem integrity, areas of high physical water risks, and areas important for the delivery of 849 ecosystem service benefits to stakeholders.

850 The organization can consult the criteria listed in Table 1 in the Appendix to identify ecologically 851 sensitive areas. An area is ecologically sensitive when it meets one or more criteria.



- 852 For more guidance and examples of tools to identify ecologically sensitive areas, see the *TNFD*
- 653 Guidance on the identification and assessment of nature-related issues: The LEAP approach [41], 854 pages 57-63.
- An operational site is in an ecologically sensitive area when it is completely or partially located in the
- ecologically sensitive area. An operational site is near an ecologically sensitive area when the
- ecologically sensitive area falls within the area affected or potentially affected (sometimes referred to
- as the area of influence) or within the radius set by the organization. The organization can use a radius if it cannot identify the area affected or potentially affected by its activities. If the organization
- uses a radius, it should explain this and report the distance of the radius used.
- The organization is required to report the distance only in cases where the operational site is near an ecologically sensitive area.
- The organization should report the size in hectares of the ecologically sensitive areas within its operational sites.
- The organization can also report polygon outlines, or maps of the ecologically sensitive areas and overlay them with the polygon outlines or maps of its operational sites.
- The organization can also report the percentage of operational sites in or near ecologically sensitive areas. This information provides a high-level understanding of the significance of biodiversity across the organization's operations.
- 870 The percentage of operational sites in or near ecologically sensitive areas is calculated using the 871 following formula:
- 874 Total number of operational sites
- 875 See references [18] and [41] in the Bibliography.
- 876 Guidance to 101-5-b-i
- 877 The organization should specify whether the areas of biodiversity importance are:
- protected through legal or other effective means;
- scientifically recognized for their importance to biodiversity;
- important for species;
- important for ecosystems; or
- important for ecological connectivity.
- 883 See Table 1 in the Appendix for more information on areas of biodiversity importance.
- 884 BibliographyGuidance to 101-5-d
- 885 Where possible, the organization should also report the location within the country or jurisdiction
- (e.g., state, city, Exclusive Economic Zone) or a precise location, such as polygon outlines or maps.
 The organization can report departure and arrival locations and transport routes for transport
- 888 activities. For fishing activities, it can report FAO major fishing areas and subareas.
- 889 For each product and service with the most significant impacts on biodiversity, the organization
- 890 should describe the level of traceability in place, for example, whether the product or service can be 891 traced to the national, regional, or local level, or a specific point of origin (e.g., farms). The
- organization can also report the volume sourced or the amount spent on each product and service.
- 893 If available, the organization should also report the information on ecologically sensitive areas
- required by 101-5-b for the products and services in its <u>supply chain</u> with the most significant impacts on biodiversity.



896 If the products in its supply chain are or contain high-impact commodities⁵, the organization can 897 report the quantity of each high-impact commodity sourced (e.g., tons of avocado) and the

898 proportion of total high-impact commodities sourced. This information provides a high-level

understanding of the significance of biodiversity across products in the organization's supply chain.

900 The organization can use the SBTN High Impact Commodity List to identify whether it sources 901 products that are or contain high-impact commodities.

902 The proportion of total high-impact commodities sourced is calculated using the following formula:

	Quantity of high-impact commodity sourced
	Quantity of total high-impact commodities sourced
L	See references [18] and [35] in the Bibliography.
	×70
	OSI
	C. C
	Still.
	CONT
	OKOS
	X (OX
	a no
	2000
	ant
	Jume
	2000
	1 HIS

⁵ SBTN defines high-impact commodities as raw and value-added materials used in economic activities that are known to have material links to the key drivers of biodiversity loss, resource depletion, and ecosystem degradation.



⁹⁰⁷ Disclosure 101-6 Direct drivers of biodiversity loss

- 908 REQUIREMENTS
 - 909 **The organization shall**:
 - 910a. for each operational site reported under 101-5-a where its activities lead to land and sea911use change, report:
 - 912 i. the size in hectares of natural ecosystem converted since a cut-off or reference date,
 913 the cut-off date or reference date, and the type of ecosystem before and after
 914 conversion;
 - ii. the size in hectares of land and sea converted from one intensively used or modified
 ecosystem to another during the <u>reporting period</u>, and the type of ecosystem before
 and after conversion;
 - b. for each operational site reported under 101-5-a where its activities lead to the
 exploitation of natural resources, report:
 - 920 i. for each wild species harvested, the quantity, the type, and extinction risk;
 - 921 ii. <u>water withdrawal</u> and <u>water consumption</u> in megaliters;
 - 922 c. for each operational site reported under 101-5-a where its activities lead to pollution,
 923 report the quantity and the type of each pollutant generated;
 - d. for each operational site reported under 101-5-a where its activities lead to the
 introduction of invasive alien species, describe how invasive alien species are or may be
 introduced;
 - 927 e. for each product and service in its <u>supply chain</u> reported under 101-5-d, report the
 928 information required under 101-6-a, 101-6-b, 101-6-c, and 101-6-d, with a breakdown by
 929 country or jurisdiction;
 - f. report contextual information necessary to understand how the data has been compiled,
 including standards, methodologies, and assumptions used.

932 GUIDANCE

- 933 This disclosure provides an understanding of the direct drivers of biodiversity loss (hereafter the
- direct drivers) leading to the most significant <u>impacts</u>. The organization should additionally report the
 information on the direct drivers for its downstream <u>value chain</u>.
- According to the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
 (IPBES), direct drivers are the drivers that 'unequivocally influence biodiversity and ecosystem
 processes'. Direct drivers are sometimes referred to as 'pressures' or 'impact drivers'. The IPBES
 global assessment has identified land and sea use change and the exploitation of natural resources
 as the main direct drivers, followed by climate change, pollution, and the introduction of invasive
 alien species. These direct drivers can also lead to the fragmentation and degradation of
- 942 ecosystems. See Box 2 for more information on direct drivers of biodiversity loss.
- 943 Information on the direct drivers informs decisions on prioritizing actions to manage biodiversity-
- related impacts by applying the mitigation hierarchy. See Disclosure 101-2 for more information on
- 945 the mitigation hierarchy. The organization's actions to mitigate direct drivers are reported under946 Disclosure 101-2.
- 947 Through its activities, an organization can use natural resources for its production processes (e.g.,
- sand used in a construction project) or produce non-product outputs (e.g., pollutants or <u>greenhouse</u>
- gas emissions). These activities, responsible for the direct drivers of biodiversity loss, can have
 negative impacts on biodiversity.
- 951 The organization needs to report only the information for the direct drivers relevant to its activities
- and its supply chain. Direct drivers can vary by location. For example, in addition to operational site
 A. the same organization has activities in another operational site (site B) responsible for exploiting
- A, the same organization has activities in another operational site (site B) responsible for exploiting



- 954 natural resources. In this case, the organization must report the information on exploiting natural955 resources for site B (not site A).
- For an example of how to present information on requirements in Disclosure 101-6, see Tables 3and 4 in the Appendix.
- 958 See references [32], [43] and [45] in the Bibliography.

959 **Box 2. Direct drivers of biodiversity loss**

960 Land and sea use change

Land and sea use change refers to how humans use and manage land and seascapes, which may
lead to a change in land and sea cover. These are changes to terrestrial and aquatic ecosystems,
including freshwater and marine ecosystems. Examples of changes in the use of freshwater
ecosystems are the construction of a hydropower dam in a river or the drainage of a wetland for
urban settlements. Land and sea use change results from the conversion of natural, intensively
used, or other modified ecosystems into another ecosystem.

967 *Exploitation of natural resources*

- 968 The exploitation of natural resources encompasses the harvest of wild organisms (animal, fungi, and 969 plant species) and the exploitation of water.
- 970 The exploitation of wild species can lead to their extinction. Some of the most exploited species
 971 include marine fish, invertebrates, and trees. Various species are hunted for bushmeat and
 972 harvested for use in the medicinal or pet trade. Unsustainable water use can lead to loss,
 973 fragmentation, and degradation of species habitats, reduce the availability of food and water for
 974 species, as well as disrupt the functioning of ecosystems.

975 Climate change

- 976 Climate change is a direct driver as it alters species' distribution, functioning, and interactions,
 977 reducing ecosystems' capacity to adapt. Climate change leads to changes in temperatures and
 978 weather patterns that, in turn, can affect species (e.g., by reducing habitats and food supply, and
 979 altering migration patterns and breeding seasons). Sea level rise and ocean acidification also
 980 negatively affect marine organisms.
- 981 The greenhouse gas (GHG) emissions from a particular operational site may not lead to biodiversity
 982 loss in the direct vicinity of the site but contribute to climate change that drives biodiversity loss.
 983 Therefore, an organization's GHG emissions and those from other organizations contribute to
 984 climate change as a global direct driver of biodiversity loss.
- 985 This disclosure does not require information on climate change. An organization's GHG emissions 986 can be reported under Disclosures 305-1, 305-2, and 305-3 in *GRI 305: Emissions 2016*.

987 Pollution

- 988 Air, water, and soil pollutants include substances (e.g., heavy metals, pesticides, solid <u>waste</u>) and 989 other pollutants such as heat, light, noise, or vibrations.
- Emission of pollutants can affect ecosystems and species. The toxicity and persistence of some
 pollutants can affect species' health (e.g., with immune, reproductive, neurotoxic, or carcinogenic
 effects). Pesticides and insecticides lead to the decline of pollinators and other species. Waste not
 properly disposed of can lead to leaks of hazardous substances into the environment, while plastic
 litter accumulates in soil and affects marine species through entanglement and ingestion. Light and
 noise can disrupt wildlife species' breeding or migration behavior, resulting in a population decline.

996 Invasive alien species

997 Invasive alien species are animals, plants, and other organisms that are introduced, accidentally or deliberately by humans, to an area outside of their natural geographical range and cause negative impacts on local biodiversity. Invasive alien species negatively affect biodiversity as they often lack predators in their new environment, allowing them to spread, become established and abundant.
1001 They can carry diseases, outcompete or prey on native species, alter food chains, and change ecosystems by, for example, altering soil composition or creating habitats that are vulnerable to wildfires. These impacts can lead to the extinction of species.



1004 Guidance to 101-6-a

The organization should report which ecosystem classification it uses to identify the types of
 ecosystems converted. The organization can report ecosystem types using the biomes or ecosystem
 functional groups in the IUCN Global Ecosystem Typology.⁶ Alternatively, the organization can
 report according to another global classification, national classification, or register. If the organization
 cannot use ecosystem classifications, it can utilize land use classifications (e.g., Globio land use

- 1010 categories).
- 1011 See reference [28] in the Bibliography.

1012 Guidance to 101-6-a-i

1013 The Accountability Framework initiative defines natural ecosystem as an ecosystem that 1014 substantially resembles - in terms of species composition, structure, and ecological function - one that is or would be found in a given area without major human impacts. It includes human-managed 1015 1016 ecosystems where much of the natural species composition, structure, and ecological function are present. Natural ecosystem conversion is the human-induced change of a natural ecosystem to 1017 1018 another use or profound change in an ecosystem's species composition, structure, or function. It can 1019 include severe degradation or introducing management practices that lead to substantial and 1020 sustained change in the ecosystem's former species composition, structure, or function.

1021 Natural ecosystem conversion is measured from a cut-off date⁷ associated with an organization's 1022 policy related to natural ecosystem conversion (e.g., deforestation-free policy). If the organization 1023 does not have such policy in place, it should select a reference date to measure natural ecosystem 1024 conversion. For instance, if 2015 has been set as a cut-off date or reference date, the organization 1025 reports the size of the ecosystem converted from 2015 until the reporting period. Common cut-off 1026 dates apply to organizations operating in the same or similar context. They support the monitoring, 1027 verification and management of natural ecosystem conversion, including in supply chains. Cut-off 1028 dates can, therefore, be selected based on sector-wide or regional cut-off dates (e.g., the 2008 cut-1029 off date from the Brazil Soy Moratorium) or those specified in certification programs (e.g., Forest 1030 Stewardship Council), legislation (e.g., EU regulation on deforestation-free products), or voluntary initiatives (e.g., Science Based Targets for Nature). Cut-off dates may differ between commodities 1031 and regions. More guidance can be found in the Accountability Framework initiative Operational 1032 1033 Guidance on Cutoff Dates [5].

- 1034 The organization should explain why it has determined the cut-off or reference dates as appropriate.
- 1035 See reference [5] and [56] in the Bibliography.

1036 Guidance to 101-6-a-ii

1037 Intensively used and other modified ecosystems are ecosystems where human activity has

1038 substantially modified an area's primary ecological functions and species composition to ecosystems

- 1039 dominated by agriculture, urban, and other industrial activities. Intensively used ecosystems are
- 1040 those covered by the biomes intensive land-use systems (T7) in the IUCN Global Ecosystem
- 1041 Typology. Other modified ecosystems include anthropogenic subterranean freshwaters (SF2),
- 1042 artificial freshwaters (F3), anthropogenic marine systems (M4), and anthropogenic shorelines (MT3).
- 1043 See reference [28] in the Bibliography.

⁷ The Accountability Framework Initiative defines cut-off date as the date after which natural ecosystem conversion, which may include deforestation, renders a given area or production unit non-compliant with no-conversion or no-deforestation commitments. A reference date is defined as the date from which natural ecosystem conversion associated with a given area or supply chain is measured or managed.



⁶ Other ecosystem classifications are aligned with the IUCN Global Ecosystem Typology. These include the SEEA Ecosystem Type Reference Classification [42] and the TNFD list of environmental assets [46].

1044 Guidance to 101-6-b-i

- 1045 Harvesting wild species involves gathering, catching, or hunting wild organisms (animal, fungi, and plant species) by the organization, including those incidentally taken. 1046
- 1047 The organization can report if the species are listed in one of the CITES Appendices. It can also 1048 report if the species are harvested from ecologically sensitive areas (e.g., from a Key Biodiversity 1049 Area, which aims to protect or conserve the harvested species).
- 1050 To report on the extinction risk of a species, the organization can use information from the IUCN Red List of Threatened Species. 1051
- See references [14] and [26] in the Bibliography. 1052

1053 Guidance to 101-6-b-ii

1054 The organization should use information reported under Disclosures 303-3 Water withdrawal and 303-5 Water consumption in GRI 303: Water and Effluents 2018⁸ to report water withdrawal and 1055

water consumption for each operational site. 1056

1057 Guidance to 101-6-c

- 1058 The organization is only required to report the type and quantity of pollutants that lead or could lead 1059 to the most significant impacts on biodiversity.
- To report on air pollution, the organization should use, where relevant, information reported under 1060 1061 Disclosure 305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions in GRI 305: Emissions 2016 for: 1062 , an offic
- 1063 NO_x:
- 1064 SO_x: •
- 1065 • Persistent organic pollutants (POP);
- Volatile organic compounds (VOCs); 1066
- Hazardous air pollutants (HAP): 1067 •
- Particulate matter (PM); 1068
- Other standard categories of air emissions from relevant regulations. 1069 •
- 1070 To report on water and soil pollution, the organization should use, where relevant, information 1071 reported under:
- 1072 Disclosure 303-4 Water discharge in GRI 303: Water and Effluents 2018 to have
- 1073 information on priority substances of concern that may cause water pollution (e.g., those 1074 leading to eutrophication).
- 1075 Disclosure 306-3 Significant spills in GRI 306: Effluents and Waste 2016. •
- 1076 For heat, light, noise, or vibration pollution, the organization should report instances that do not 1077 comply with legal requirements for permitted pollution levels.

1078 Guidance to 101-6-d

- 1079 Non-invasive alien species are not required to be reported under 101-6-d.
- 1080 Invasive alien species can be introduced accidentally (e.g., transport, discharge of ballast waters) or
- 1081 on purpose (e.g., for pest control, horticulture, pets, zoological gardens, and aquaria). The
- 1082 organization should report the species that are or may be introduced. For example, an organization

⁸ The disclosures in GRI 303; Water and Effluents 2018, GRI 305; Emissions 2016, and GRI 306; Effluents and Waste 2016 (Disclosure 306-3 Significant spills) do not require information to be reported by operational site: they require aggregate information. The organization can refer to the original data sources used to compile the information for these disclosures to obtain the data by operational site.



- 1083 imports ornamental plants to new areas, which may threaten local biodiversity. A maritime shipping
- 1084 organization may introduce shellfish, crustaceans, and other species to new areas through
- 1085 contaminated ballast water or encrusted organisms on ships. It can also inadvertently introduce
- 1086 other species, such as insects and rodents, through the transport of goods.
- 1087 National regulations define which species are considered invasive alien species in a particular
 1088 country. The Global Invasive Species Database and Global Register of Introduced and Invasive
 1089 Species also provide information on invasive alien species.
- 1090 The organization can also describe how those species affect or may affect surrounding species and 1091 ecosystems.

1092 Guidance to 101-6-e

- 1093 It may not be feasible for the organization to obtain primary data on direct drivers from suppliers. In 1094 such a case, the organization can estimate the direct drivers using multi-regional input-output 1095 models and lifecycle impact assessments in combination with data on the volume or amount spent 1096 on products and services. Multi-regional input-output models can provide estimates of the 1097 environmental inputs (e.g., water use) and outputs (e.g., air emissions) associated with the products 1098 and services in its supply chain. See Aligning accounting approaches for nature (Align) Measuring 1099 and valuing biodiversity across supply chains [48] for more information on the methodologies and 1100 data to measure direct drivers in supply chains.
- 1101 If the organization cannot report the size of the natural ecosystem converted for the products in its
- 1102 supply chain, it can report, for each product, the percentage of sourced volume determined to be
- 1103 deforestation- or conversion-free and describe the assessment methods used. For example, out of
- 1104 100 tons of soy sourced, an organization has determined that 90% is deforestation-free. Assessment
- 1105 methods can include monitoring, certification, sourcing from low-risk jurisdictions with no or
- 1106 negligible recent conversion, or sourcing from verified suppliers. To be deemed conversion- or
- 1107 deforestation-free, products must be assessed as not causing or contributing to natural ecosystem
- 1108 conversion, including deforestation, after an appropriate cut-off date.
- 1109 See reference [48] in the Bibliography.

1110 Guidance to 101-6-f

- 1111 The organization should use primary data to report information on the direct drivers where possible.
- 1112 When primary data is unavailable, the organization can use secondary or modeled data (e.g.,
- 1113 lifecycle impact assessments). However, such data are less accurate and may not reflect the
- 1114 effectiveness of actions to manage the organization's impacts.
- 1115 The organization should explain which information draws on primary, secondary, or modeled data,
- as well as any limitations of methodologies and data used. When reporting secondary or modeled
- 1117 data, the organization should report which datasets it used and if it plans to improve the accuracy of 1118 data.



Disclosure 101-7 Changes to the state of 1119 biodiversity 1120

1121 REQUIREMENTS

- 1122 The organization shall:
- 1123 a. for each operational site reported under 101-5-a, report the following information on affected or potentially affected ecosystems: 1124
- 1125 i. the ecosystem type for the base year;
- 1126 ii. the ecosystem size in hectares for the base year:
- 1127 iii. the ecosystem condition for the base year and the current reporting period;
- 1128 b. report contextual information necessary to understand how the data has been compiled, 1129 including standards, methodologies, and assumptions used.

GUIDANCE 1130

- 1131 This disclosure provides information about the changes in the condition of the ecosystem affected or potentially affected by the organization. 1132
- 1133 The state of biodiversity is the holistic quality of the components of biodiversity (genes, species, and
- ecosystems), and is a function of the condition and size of its component. This disclosure focuses on 1134
- 1135 the condition and size of affected ecosystems. By reporting this information for the base year and
- 1136 the current reporting period, the organization provides information about the ecosystem's overall
- health over time. 1137
- 1138 Changes in the state of biodiversity may reflect the cumulative impacts of the organization's activities
- and the activities of others, such as governments, local communities, or other organizations. It is not 1139
- always possible to determine how much of the change in the state of biodiversity is due to the 1140
- 1141 activities of the organization or others. However, the information reported under this disclosure, 1142
- together with Disclosure 101-6, helps to understand the organization's actual and potential impacts
- on biodiversity and can inform the management of these impacts. 1143
- 1144 The organization should report information on changes to the state of biodiversity for each product and service reported under 101-5-d by country or jurisdiction. It should also report this information 1145 1146 for its downstream value chain.
- The organization can organize the information on the state of biodiversity into structured biodiversity 1147 1148 accounts. Biodiversity accounts enable more accurate monitoring of gains and losses of biodiversity
- 1149 over time. A core component of biodiversity accounts is the compilation of an asset inventory for
- 1150 each ecosystem type so that gains in one type do not compensate for losses in another. They are
- also useful in tracking progress against targets to halt and reverse biodiversity loss. See the 1151
- Endangered Wildlife Trust Biological Diversity Protocol [16] for more information on biodiversity 1152
- 1153 accounts.
- 1154 For an example of how to present information on requirements in Disclosure 101-7, see Table 3 in the Appendix. 1155
- 1156 See references [16] and [46] in the Bibliography.

1157 Guidance to 101-7-a

- 1158 When reporting information on the affected or potentially affected ecosystems, the organization
- 1159 should consider all ecosystem types in the area that is or could be affected by its activities, including
- 1160 beyond its operational sites, if relevant. The state of the overall ecosystem, which extends beyond
- the areas affected by the organization, is not required for reporting. For example, an organization 1161 that owns a soy plantation in the Amazon is required to report information on the type, size, and
- 1162 1163 condition of the affected part of the ecosystem rather than reporting on the entire Amazon region.
- 1164 The base year is when the organization collects baseline information on the ecosystem type, size,
- 1165 and condition. The base year may be the start of an organization's activities, the date from which it



- owned, leased, or managed a particular site, or when it committed to halt and reverse biodiversityloss.
- 1168 Baseline information can be collected through environmental impact assessments, which provide
- 1169 information on the condition of and trends in biodiversity in a particular area before an organization's
- 1170 activities start. For more information on best practices to conduct baseline studies, see references
- 1171 [23] and [25] in the Bibliography.
- 1172 The organization should report the base year. It should report how it has determined the base year 1173 and baseline information under 101-7-b.
- 1174 The size and condition of an affected ecosystem can be combined into one unit: condition-adjusted
- area. This is the size of the ecosystem adjusted for its condition, and the unit (e.g., equivalent
- 1176 hectares) represents the residual condition within that area. The organization can also report
- 1177 <u>impacts</u> on affected ecosystems using condition-adjusted hectares. See Align Measuring Ecosystem
- 1178 Condition A primer for business [50] and the Endangered Wildlife Trust Biological Diversity 1179 Protocol [16] for more information on condition-adjusted areas.
- 1180 See references [16], [23], [25] and [50] in the Bibliography.

1181 Guidance to 101-7-a-i

- 1182 The organization should report which ecosystem classification it uses to identify the types of
- 1183 ecosystems. The organization can report ecosystem types using the biomes or ecosystem functional
- 1184 groups in the IUCN Global Ecosystem Typology.⁹ Alternatively, the organization can report
- 1185 according to another global classification, national classification, or register. If the organization
- 1186 cannot use ecosystem classifications, it can use land use classifications (e.g., Globio land use
- 1187 categories) instead.
- 1188 See reference [28] in the Bibliography.

1189 Guidance to 101-7-a-ii

1190 Ecosystem size, also referred to as ecosystem extent, is the area coverage of the ecosystem that is 1191 affected or potentially affected by the organization's activities. This is a fixed area over which the 1192 condition of the ecosystem is measured over time.

1193 See reference [51] in the Bibliography.

1194 Guidance to 101-7-a-iii

1199

- 1195 Ecosystem condition is the quality of an ecosystem measured by its living and non-living
- 1196 characteristics against a reference condition¹⁰. Living and non-living characteristics include:
- the ecosystem's composition, function, and structure;
- the landscape characteristics (e.g., connectivity); and
 - the physical and chemical state characteristics (e.g., soil structure and soil nutrient levels).
- 1200 Ecosystem condition can also provide information on the ecosystem's capacity to supply ecosystem 1201 services now and in the future.

The activities of the organizations may degrade the condition of affected ecosystems through the direct drivers of biodiversity loss. For example, the emission of pollutants, partial deforestation, or <u>water withdrawal</u> in an area with <u>water stress</u>, may affect the ecosystem's structure, composition, or function. If land and sea use change is the primary direct driver of biodiversity loss, the activities of an organization lead to the conversion of an ecosystem into a different type of ecosystem. In this case, the conversion of the ecosystem results in a complete reduction in ecosystem condition.

1208 Methods to measure ecosystem condition should reflect the relevant characteristics of the 1209 ecosystem. The organization can use methods that directly measure characteristics or estimate

¹⁰ A reference condition is used to calibrate the measurement of ecosystem condition over time. It differs from a baseline, which is the condition of the ecosystem for the base year. See *Align Measuring Ecosystem Condition* – *A primer for business* [50] for more information on reference condition.



⁹ Other ecosystem classifications are aligned with the IUCN Global Ecosystem Typology. These include the SEEA Ecosystem Type Reference Classification and the TNFD list of environmental assets.

- 1210 ecosystem conditions based on direct drivers. These methods can be specific to certain types of
- 1211 ecosystems (e.g., types of wetlands or forests) or applicable to different ecosystem types (i.e.,
- applicable across terrestrial, freshwater, or marine realms). See Table 2 in the Appendix for
- 1213 examples of methods to measure or estimate ecosystem condition. See Align Measuring Ecosystem
- 1214 Condition A primer for business [50] and Taskforce on Nature-related Financial Disclosures
- 1215 (TNFD) Guidance on the identification and assessment of nature-related issues: The LEAP
- 1216 *approach* [41] for more information on how to measure ecosystem condition.
- 1217 If the organization monitors the condition of affected or potentially affected ecosystems at a 1218 frequency different from its sustainability reporting frequency, it should report the most recent
- 1219 information and does not need additional measurement to meet the requirement.
- 1220 See references [41], [46], [50] and [51] in the Bibliography.

1221 Guidance to 101-7-b

- 1222 The organization should use primary data to report on direct drivers where possible (e.g., data 1223 collected through field surveys, eDNA, or derived from satellite imagery).
- 1224 When primary data is unavailable, the organization can use secondary or modeled data (e.g., data
- 1225 layers on ecosystem extent and condition, life cycle impact assessments). Modeled data are issued 1226 from models that quantify how the different direct drivers affect the state of biodiversity. These
- 1227 models use globally collected data, and the results are applied locally to estimate how the
- 1228 organization's activities can lead to ecosystem changes. They include geospatial data layers that
- 1229 can be used to identify changes in the size and condition of ecosystems, such as the level of habitat
- 1230 fragmentation and connectivity, or identify species that may be present at specific sites.
- 1231 The organization should explain which information draws on primary, secondary, or modeled data,
- 1232 as well as any limitations of methodologies and data used. When reporting secondary or modeled 1233 data, the organization should report which datasets it has used and if it plans to improve the
- 1233 data, the organization should report which datasets it has used and if it plans to improve the 1234 accuracy of data.

1235 Guidance to 101-7

- 1236 The organization should additionally report information on affected or potentially affected species for 1237 the operational sites reported under 101-5-a. The organization can report the species, its extinction 1238 risk, and population size for the baseline and current reporting period.
- 1239 The extinction risk measures the threat status of a species and how an organization's activities may 1240 affect the threat status. The global, regional, and national IUCN Red Lists can be used to determine 1241 the species extinction risk (i.e., Critically Endangered, Endangered, Vulnerable, Near Threatened, 1242 and Least Concern). Change in the available species habitat can potentially be used as a proxy to 1243 measure <u>impact</u> on local or global extinction risk, noting that other factors can drive extinction risk 1244 (e.g., hunting, climate change).
- Population size measures the number of individuals of a species within an area. It can be measured by the number of mature individuals or the number of breeding pairs. When the population size is unavailable, trends in relative population abundance or in species area of habitat can be used as a proxy.
- 1249 The organization can report information for the following species:
- 1250 Species whose local or overall populations have or could be changed significantly.
- 1251 Species that are legally protected by local, national, or international laws and conventions (e.g., species listed in one of the CITES Appendices).
- Species that are recognized as a priority species at the local, national, or international level (e.g., species listed as threatened on the international IUCN Red List or species that trigger a Key Biodiversity Area designation).
 - Species that have a critical role in the ecosystem (e.g., keystone species).
- Species that have a significant cultural or economic role for <u>stakeholders</u> (e.g., hunting, harvesting, pollination).
- 1259 See references [26] and [51] in the Bibliography.



1256

1260 **Disclosure 101-8 Ecosystem services**

1261 **REQUIREMENTS**

1262 **The organization shall:**

1263a. for each operational site reported under 101-5-a, list the ecosystem services and1264beneficiaries affected or potentially affected by the organization's activities;

b. explain how the ecosystem services and beneficiaries are or could be affected by the organizations' activities.

1267 GUIDANCE

1270

1271

1272

1268 Ecosystem services occur through an ecosystem's normal functioning and can fall into one or more 1269 of the following categories:

- provisioning services;
- regulating and maintenance services; and
- cultural services.

1273 Provisioning services contribute to benefits extracted or harvested from ecosystems. Examples are timber in a forest, freshwater from a river, and subsistence hunting. Regulating and maintenance 1274 services result from the ability of ecosystems to regulate biological processes and influence climate, 1275 hydrological, and biochemical cycles, thereby maintaining environmental conditions beneficial to 1276 people. An example is the role of forests in preventing soil erosion. Cultural services are the non-1277 material benefits people (beneficiaries) obtain from ecosystems through spiritual enrichment, 1278 1279 cognitive development, reflection, recreation, and aesthetic experiences. Examples are the 1280 recreational value of a forest and the cultural importance of a heritage landscape for a local

1281 community.

1282 Biodiversity plays an important role in maintaining the quality, quantity, and resilience of ecosystem 1283 service flows, and it provides ecosystem services that beneficiaries rely upon now and into the future. The diversity of genes, species, and ecosystems provides a greater range of ecosystem 1284 service and higher overall quantity, quality, and resilience of ecosystem services and improves the 1285 capacity of ecosystems to function effectively. A change in the state of biodiversity can lead to 1286 changes in ecosystem services. This, in turn, can have an impact on the beneficiaries of these 1287 1288 ecosystem services. For example, a decline in the number of bees caused by the organization's 1289 activities can lead to decreased pollination services. If the crops are not properly pollinated by the 1290 bees, the quality and quantity of the crops produced may be affected, reducing the available food for 1291 the local community that grows the crops.

1292 This disclosure gives insight into the ecosystem services and beneficiaries affected or potentially 1293 affected by the organization's activities. The organization should also list the ecosystem services

1294 and beneficiaries affected or potentially affected by its <u>suppliers'</u> activities for each country or 1295 jurisdiction reported under 101-5-d and those affected by the activities of its downstream entities.

- 1296 For an example of how to present information on requirements in Disclosure 101-8, see Table 3 in 1297 the Appendix.
- 1298 See references [31] and [46] in the Bibliography.

1299 Guidance to 101-8-a

Beneficiaries can include <u>Indigenous Peoples</u>, local communities, and other organizations. The reporting organization can also be one of the beneficiaries. The organization can report the number of beneficiaries when disclosing information for this requirement (e.g., 50 farmers located in the area).

The organization should describe the approach used to identify the ecosystem services reported
under 101-8-a. The organization can explain if it engages with <u>stakeholders</u> to identify the
ecosystem services and beneficiaries affected. It can also use the following methodologies and tools
to identify ecosystem services:

• the ENCORE tool;



- 1309 the Natural Capital Protocol from the Natural Capital Coalition; •
- 1310 the Taskforce on Nature related Financial Disclosures (TNFD) LEAP approach, which draws • 1311 on the UN SEEA Ecosystem Accounting;
 - the World Resources Institute (WRI) Corporate Ecosystem Services Review. •

1313 See references [20], [32], [41], [46] and [56] in the Bibliography.

1314 Guidance to 101-8-b

1312

- 1315 The organization's activities may lead to an increase or decrease in the quality and quantity of
- ecosystem services. For example, the organization can explain that cutting trees in the forest has 1316
- decreased food provisioning services, which has a negative impact on the local community that 1317
- needs to find an alternative food source. In another example, the organization can explain that 1318 switching to agroforestry has resulted in an increase in soil erosion control services, which has a 1319
- 1320



1321 Glossary

1322 This glossary provides definitions for terms used in this Standard. The organization is required to 1323 apply these definitions when using the GRI Standards.

1324The definitions included in this glossary may contain terms that are further defined in the complete1325GRI Standards Glossary. All defined terms are underlined. If a term is not defined in this glossary or in

1326 the complete GRI Standards Glossary, definitions that are commonly used and understood apply.

1327 base year

1328 historical datum (such as year) against which a measurement is tracked over time

1329 baseline

- 1330 starting point used for comparisons
- 1331 Note: In the context of energy and emissions reporting, the baseline is the projected energy
- 1332 consumption or emissions in the absence of any reduction activity.

1333 business partner

- entity with which the organization has some form of direct and formal engagement for the purpose ofmeeting its business objectives
- 1336 Source: Shift and Mazars LLP, UN Guiding Principles Reporting Framework, 2015; modified
- Examples: affiliates, business-to-business customers, clients, first-tier <u>suppliers</u>, franchisees, joint
 venture partners, investee companies in which the organization has a shareholding position
- 1339 Note: Business partners do not include subsidiaries and affiliates that the organization controls.

1340 business relationships

- relationships that the organization has with <u>business partners</u>, with entities in its <u>value chain</u> including
 those beyond the first tier, and with any other entities directly linked to its operations, products, or
 services
- Source: United Nations (UN), Guiding Principles on Business and Human Rights: Implementing the
 United Nations "Protect, Respect and Remedy" Framework, 2011; modified
- 1346 Note: Examples of other entities directly linked to the organization's operations, products, or services 1347 are a non-governmental organization with which the organization delivers support to a local
- 1348 community or state security forces that protect the organization's facilities.

1349 catchment

- area of land from which all surface runoff and subsurface water flows through a sequence of streams,
 rivers, aquifers, and lakes into the sea or another outlet at a single river mouth, estuary, or delta
- Source: Alliance for Water Stewardship (AWS), AWS International Water Stewardship Standard,
 Version 1.0, 2014; modified
- 1354Note: Catchments include associated groundwater areas and might include portions of waterbodies1355(such as lakes or rivers). In different parts of the world, catchments are also referred to as
- 1356 'watersheds' or 'basins' (or sub-basins).
- 1357 child
- person under the age of 15 years, or under the age of completion of compulsory schooling, whicheveris higher
- 1360 Note 1: Exceptions can occur in certain countries where economies and educational facilities are
- 1361 insufficiently developed, and a minimum age of 14 years applies. These countries of exception are
- specified by the International Labour Organization (ILO) in response to a special application by the
- 1363 country concerned and in consultation with representative organizations of employers and workers.



- 1364 Note 2: The ILO *Minimum Age Convention,* 1973, (No. 138), refers to both child labor and young 1365 workers.
- 1366 effluent
- 1367 treated or untreated wastewater that is discharged
- Source: Alliance for Water Stewardship (AWS), AWS International Water Stewardship Standard,
 Version 1.0, 2014
- 1370 employee
- 1371 individual who is in an employment relationship with the organization according to national law or 1372 practice
- 1373 greenhouse gas (GHG)
- 1374 gas that contributes to the greenhouse effect by absorbing infrared radiation

1375 grievance

- 1376 perceived injustice evoking an individual's or a group's sense of entitlement, which may be based on
- 1377 law, contract, explicit or implicit promises, customary practice, or general notions of fairness of1378 aggrieved communities
- 1379 Source: United Nations (UN), *Guiding Principles on Business and Human Rights: Implementing the* 1380 United Nations "Protect, Respect and Remedy" Framework, 2011

1381 grievance mechanism

- 1382 routinized process through which <u>grievances</u> can be raised and <u>remedy</u> can be sought
- 1383 Source: United Nations (UN), *Guiding Principles on Business and Human Rights: Implementing the* 1384 *United Nations "Protect, Respect and Remedy" Framework*, 2011; modified
- 1385 Note: See Guidance to Disclosure 2-25 in *GRI 2: General Disclosures 2021* for more information on 1386 'grievance mechanism'.

1387 groundwater

- 1388 water that is being held in, and that can be recovered from, an underground formation
- 1389 Source: International Organization for Standardization. ISO 14046:2014. *Environmental management* 1390 — Water footprint — Principles, requirements and guidelines. Geneva: ISO, 2014; modified

1391 human rights

- 1392 rights inherent to all human beings, which include, at a minimum, the rights set out in the United
- Nations (UN) International Bill of Human Rights and the principles concerning fundamental rights set
 out in the International Labour Organization (ILO) Declaration on Fundamental Principles and Rights
 at Work
- 1396 Source: United Nations (UN), *Guiding Principles on Business and Human Rights: Implementing the* 1397 *United Nations "Protect, Respect and Remedy" Framework*, 2011; modified
- 1398 Note: See Guidance to 2-23-b-i in *GRI 2: General Disclosures 2021* for more information on 'human rights'.
- 1400 impact
- effect the organization has or could have on the economy, environment, and people, including on their
 human rights, which in turn can indicate its contribution (negative or positive) to sustainable
- 1403 <u>development</u>
- 1404 Note 1: Impacts can be actual or potential, negative or positive, short-term or long-term, intended or 1405 unintended, and reversible or irreversible.
- 1406 Note 2: See section 2.1 in *GRI 1: Foundation 2021* for more information on 'impact'.

1407 Indigenous Peoples

1408 Indigenous Peoples are generally identified as:



- tribal peoples in independent countries whose social, cultural and economic conditions
 distinguish them from other sections of the national community, and whose status is regulated
 wholly or partially by their own customs or traditions or by special laws or regulations;
- peoples in independent countries who are regarded as Indigenous on account of their descent from the populations which inhabited the country, or a geographical region to which the country belongs, at the time of conquest or colonization or the establishment of present state boundaries and who, irrespective of their legal status, retain some or all of their own social, economic, cultural and political institutions.
- Source: International Labour Organization (ILO), *Indigenous and Tribal Peoples Convention*,1989 (No. 169)

1419 local community

- individuals or groups of individuals living or working in areas that are affected or that could be affectedby the organization's activities
- 1422 Note: The local community can range from those living adjacent to the organization's operations to 1423 those living at a distance.

1424 material topics

topics that represent the organization's most significant <u>impacts</u> on the economy, environment, and
 people, including impacts on their <u>human rights</u>

- 1427 Note: See section 2.2 in *GRI 1: Foundation 2021* and section 1 in *GRI 3: Material Topics 2021* for
- 1428 more information on 'material topics'.

1429 remedy / remediation

- 1430 means to counteract or make good a negative impact or provision of remedy
- Source: United Nations (UN), *The Corporate Responsibility to Respect Human Rights: An Interpretive Guide*, 2012; modified
- Examples: apologies, financial or non-financial compensation, prevention of harm through injunctions or guarantees of non-repetition, punitive sanctions (whether criminal or administrative, such as fines),
- 1435 restitution, restoration, rehabilitation

1436 reporting period

- 1437 specific time period covered by the reported information
- 1438 Examples: fiscal year, calendar year
- 1439 seawater
- 1440 water in a sea or in an ocean
- Source: International Organization for Standardization. ISO 14046:2014. Environmental management
 Water footprint Principles, requirements and guidelines. Geneva: ISO, 2014; modified

1443 severity (of an impact)

- 1444 The severity of an actual or potential negative <u>impact</u> is determined by its scale (i.e., how grave the 1445 impact is), scope (i.e., how widespread the impact is), and irremediable character (how hard it is to 1446 counteract or make good the resulting harm).
- Source: Organisation for Economic Co-operation and Development (OECD), OECD Due Diligence
 Guidance for Responsible Business Conduct, 2018; modified
- 1449 United Nations (UN), *The Corporate Responsibility to Respect Human Rights: An Interpretive Guide*,2012; modified
- 1451 Note: See section 1 in *GRI 3: Material Topics 2021* for more information on 'severity'.

1452 stakeholder

individual or group that has an interest that is affected or could be affected by the organization'sactivities



- Source: Organisation for Economic Co-operation and Development (OECD), OECD Due Diligence
 Guidance for Responsible Business Conduct, 2018; modified
- 1457 Examples: <u>business partners</u>, civil society organizations, consumers, customers, <u>employees</u> and
- other workers, governments, local communities, non-governmental organizations, shareholders and
 other investors, suppliers, trade unions, vulnerable groups
- 1460 Note: See section 2.4 in GRI 1: Foundation 2021 for more information on 'stakeholder'.

1461 supplier

- 1462 entity upstream from the organization (i.e., in the organization's <u>supply chain</u>), which provides a 1463 product or service that is used in the development of the organization's own products or services
- 1464 Examples: brokers, consultants, contractors, distributors, franchisees, home <u>workers</u>, independent 1465 contractors, licensees, manufacturers, primary producers, sub-contractors, wholesalers
- 1466 Note: A supplier can have a direct <u>business relationship</u> with the organization (often referred to as a 1467 first-tier supplier) or an indirect business relationship.

1468 supply chain

range of activities carried out by entities upstream from the organization, which provide products or services that are used in the development of the organization's own products or services

1471 surface water

- water that occurs naturally on the Earth's surface in ice sheets, ice caps, glaciers, icebergs, bogs,ponds, lakes, rivers, and streams
- 1474 Source: CDP, CDP Water Security Reporting Guidance, 2018; modified

1475 sustainable development / sustainability

- 1476 development that meets the needs of the present without compromising the ability of future 1477 generations to meet their own needs
- 1478 Source: World Commission on Environment and Development, Our Common Future, 1987
- 1479 Note: The terms 'sustainability' and 'sustainable development' are used interchangeably in the GRI1480 Standards.

1481 third-party water

- 1482 municipal water suppliers and municipal wastewater treatment plants, public or private utilities, and 1483 other organizations involved in the provision, transport, treatment, disposal, or use of water and
- 1484 <u>effluent</u>

1485 value chain

- range of activities carried out by the organization, and by entities upstream and downstream from the organization, to bring the organization's products or services from their conception to their end use
- 1488 Note 1: Entities upstream from the organization (e.g., <u>suppliers</u>) provide products or services that are 1489 used in the development of the organization's own products or services. Entities downstream from the 1490 organization (e.g., distributors, customers) receive products or services from the organization.
- 1491 Note 2: The value chain includes the supply chain.

1492 vulnerable group

- 1493 group of individuals with a specific condition or characteristic (e.g., economic, physical, political,
- 1494 social) that could experience negative <u>impacts</u> as a result of the organization's activities more
- 1495 <u>severely</u> than the general population
- 1496 Examples: <u>children</u> and youth; elderly persons; ex-combatants; HIV/AIDS-affected households;
- 1497 <u>human rights</u> defenders; <u>indigenous peoples</u>; internally displaced persons; migrant workers and their
- families; national or ethnic, religious and linguistic minorities; persons who might be discriminated
- against based on their sexual orientation, gender identity, gender expression, or sex characteristics



- (e.g., lesbian, gay, bisexual, transgender, intersex); persons with disabilities; refugees or returning
 refugees; women
- 1502 Note: Vulnerabilities and impacts can differ by gender.

1503 waste

1504 anything that the holder discards, intends to discard, or is required to discard

1505 Source: United Nations Environment Programme (UNEP), *Basel Convention on the Control of* 1506 *Transboundary Movements of Hazardous Wastes and Their Disposal*, 1989

- 1507 Note 1: Waste can be defined according to the national legislation at the point of generation.
- Note 2: A holder can be the reporting organization, an entity in the organization's <u>value chain</u>
 upstream or downstream (e.g., <u>supplier</u> or consumer), or a waste management organization, among
 others.

1511 water consumption

- 1512 sum of all water that has been withdrawn and incorporated into products, used in the production of
- 1513 crops or generated as waste, has evaporated, transpired, or been consumed by humans or livestock,
- 1514 or is polluted to the point of being unusable by other users, and is therefore not released back to
- 1515 <u>surface water, groundwater, seawater, or a third party</u> over the course of the <u>reporting period</u>
- 1516 Source: CDP, CDP Water Security Reporting Guidance, 2018; modified
- 1517 Note: Water consumption includes water that has been stored during the reporting period for use or 1518 discharge in a subsequent reporting period.

1519 water stress

- ability, or lack thereof, to meet the human and ecological demand for water
- 1521 Source: CEO Water Mandate, Corporate Water Disclosure Guidelines, 2014
- 1522 Note 1: Water stress can refer to the availability, quality, or accessibility of water.
- 1523 Note 2: Water stress is based on subjective elements and is assessed differently depending on
- societal values, such as the suitability of water for drinking or the requirements to be afforded toecosystems.
- 1526 Note 3: Water stress in an area may be measured at <u>catchment</u> level at a minimum.
- 1527 water withdrawal
- sum of all water drawn from <u>surface water</u>, <u>groundwater</u>, <u>seawater</u>, or a <u>third party</u> for any use over
 the course of the <u>reporting period</u>

1530 **worker**

- 1531 person that performs work for the organization
- 1532 Examples: employees, agency workers, apprentices, contractors, home workers, interns, self-
- employed persons, sub-contractors, volunteers, and persons working for organizations other than the
 reporting organization, such as for <u>suppliers</u>
- 1535 Note: In the GRI Standards, in some cases, it is specified whether a particular subset of workers is 1536 required to be used.



1537 **Bibliography**

1538 This section lists authoritative intergovernmental instruments and additional references used in 1539 developing this Standard, as well as resources that the organization can consult.

1540 **Authoritative instruments:**

- United Nations (UN), Agreement under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction, 2023.
- 1544 2. United Nations (UN), *Convention on Biological Diversity*, 1992.
- 1545 3. United Nations (UN), *Kunming-Montreal Global Biodiversity Framework*, 2022.
- United Nations (UN), Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity, 2011.

1549 Additional references:

- Accountability Framework initiative, *The Accountability Framework Operational Guidance on Cutoff Dates*, 2023.
- 1552 6. Accountability Framework initiative, Terms and Definitions, 2019.
- BirdLife International, UNEP-WCMC, RSPB, FFI and the University of Cambridge, Strengthening implementation of the mitigation hierarchy: managing biodiversity risk for conservation gains, 2015.
- Bull, J.W., Baker, J., Griffiths, V.F, Jones, J.P.G., and Milner-Gulland, E.J., *Ensuring No Net Loss for people and biodiversity: good practice principles*, 2018.
- 1558 9. Business and Biodiversity Offsets Programme (BBOP), *Glossary*, 2018.
- 1559 10. Business and Biodiversity Offset Program (BBOP), Resource Paper: No Net Loss and Loss-Gain
 1560 Calculations in Biodiversity Offsets, 2012.
- 1561 11. Business and Biodiversity Offsets Programme (BBOP), *Standard on Biodiversity Offsets*, 2012.
- 1562 12. Convention on Biological Diversity, Ecologically or Biologically Significant Marine Areas, https://www.cbd.int/ebsa/ebsas, accessed on 28 November 2023.
- 1564
 13. Convention on Biodiversity, The Access and benefit-sharing Clearing-House, https://absch.cbd.int/en/search, accessed on 28 November 2023.
- 1566 14. Convention on international trade in endangered species of wild fauna and flora (CITES),
 1567 Appendices I, II and III, 2023.
- 15. Cross Sector Biodiversity Initiative (CSBI), A cross-sector guide for implementing the Mitigation Hierarchy, 2015.
- 1570 16. Endangered Wildlife Trust, *The Biological Diversity Protocol (BD Protocol)*, 2020.
- 1571 17. Food and Agriculture Organization of the United Nations (FAO), International Union for
 1572 Conservation of Nature (IUCN CEM) and Society for Ecological Restoration (SER), *Principles for* 1573 ecosystem restoration to guide the United Nations Decade 2021–2030, 2021.
- 1574 18. Food and Agriculture Organization of the United Nations (FAO), *FAO Major Fishing Areas*, 1575 https://www.fao.org/fishery/en/area/search, accessed on 28 November 2023.
- 1576
 19. Food and Agriculture Organization of the United Nations (FAO), Globally Important Agricultural Heritage Systems (GIAHS), https://www.fao.org/giahs/giahsaroundtheworld/en/, accessed on 28 November 2023.
- 1579 20. Global Canopy, United Nations Environment Programme Finance Initiative (UNEP FI) and United
 1580 Nations Environment Programme-World Conservation Monitoring Center (UNEP-WCMC),



- 1581 ENCORE tool, https://encore.naturalcapital.finance/en/data-and-methodology/data, accessed on 28 November 2023.
- 1583 21. Global Invasive Species Specialist Group (ISSG), Global Invasive Species Database, http://www.iucngisd.org/gisd/, accessed on 28 November 2023.
- 1585 22. Global Invasive Species Specialist Group (ISSG), Global Register of Introduced and Invasive
 1586 Species, https://griis.org/download, accessed on 28 November 2023.
- 1587 23. Gullison, R.E., J. Hardner, S. Anstee, M. Meyer, Good Practices for the Collection of Biodiversity
 1588 Baseline Data, 2015.
- 1589 24. Integrated Biodiversity Assessment Tool Alliance (IBAT), The Data, https://www.ibatalliance.org/the-data?locale=en, accessed on 28 November 2023.
- 1591 25. International Finance Corporation (IFC), *Performance Standard 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources*, 2012.
- 1593 26. International Union for Conservation of Nature (IUCN), The IUCN Red List of Threatened
 1594 Species, https://www.iucnredlist.org/resources/threat-classification-scheme, accessed on 28
 1595 November 2023.
- 1596 27. International Union for Conservation of Nature (IUCN), *IUCN Policy on Biodiversity Offsets*, 2016.
- 1597 28. Keith, D.A., Ferrer-Paris, J.R., Nicholson, E. and Kingsford, R.T, *The IUCN Global Ecosystem* 1598 *Typology 2.0: Descriptive profiles for biomes and ecosystem functional groups*, 2020.
- 1599 29. Key Biodiversity Areas (KBA) Partnership, KBA Data, https://www.keybiodiversityareas.org/kbadata, accessed on 28 November 2023.
- Marine Mammal Protected Areas Task force, Important Marine Mammal Areas e-Atlas,
 https://www.marinemammalhabitat.org/imma-eatlas/, accessed on 28 November 2023.
- 1603 31. Millennium Ecosystem Assessment, *Ecosystems and Human Well-being: Biodiversity Synthesis*,
 2005.
- 1605 32. Natural Capital Coalition, *Natural Capital Protocol*, 2016.
- 1606 33. Organisation for Economic Cooperation and Development (OECD), *Biodiversity Offsets: Effective Design and Implementation*, OECD Publishing, Paris, 2016.
- 1608 34. Ramsar, Ramsar Site Information Services, https://rsis.ramsar.org/, accessed on 28 November
 2023.
- Science Based Targets Network (SBTN), High Impact Commodity List,
 https://sciencebasedtargetsnetwork.org/wp-content/uploads/2023/05/SBTN-High-Impact Commodity-List-v1.xlsx, accessed on 28 November 2023.
- 1613 36. Science Based Targets Network (SBTN), Materiality Screening Tool,
 1614 https://sciencebasedtargetsnetwork.org/wp-content/uploads/2023/05/SBTN-Materiality-Screening 1615 Tool-v1.xlsx, accessed on 28 November 2023.
- 1616 37. Science Based Targets Network (SBTN), Science-based targets for nature: initial guidance for business, 2020.
- 1618 38. Science Based Targets Network (SBTN), Science-based targets for nature: technical guidance
 1619 Step 1 Assess, 2023.
- 1620 39. Science Based Targets Network (SBTN), *Target-setting tools and Guidance*, 2023.
- 40. Science Based Targets Network (SBTN) and Taskforce on Nature-related Financial Disclosures
 (TNFD), *Guidance for corporates on science-based targets*, 2023.
- 1623 41. Taskforce on Nature-related Financial Disclosures (TNFD), *Guidance on the identification and assessment of nature-related issues: The LEAP approach*, 2023.
- 1625 42. Taskforce on Nature-related Financial Disclosures (TNFD), *Recommendations of the Taskforce on Nature-related Financial Disclosures*, 2023.



- 1627 43. The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES),
 1628 Global assessment report of the Intergovernmental Science-Policy Platform on Biodiversity and
 1629 Ecosystem Services, 2019.
- 44. The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), *Information on scoping for a thematic assessment of invasive alien species and their control*,
 2018.
- 45. United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage
 Convention, World Heritage Interactive Map, https://whc.unesco.org/en/interactive-map/,
 accessed on 28 November 2023.
- 46. United Nations et al., System of Environmental-Economic Accounting—Ecosystem Accounting
 (SEEA EA), 2021.
- 47. United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC),
 1639 ICCA Registry, https://www.iccaregistry.org/en/about/icca-registry, accessed on 28 November
 2023.
- 48. United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC),
 Capitals Coalition, Arcadis and International Climate Finance (ICF), *Measuring and valuing biodiversity across supply chains*, Aligning accounting approaches for nature, 2023.
- 49. United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC),
 Capitals Coalition, Arcadis and International Climate Finance (ICF), *Measuring and valuing biodiversity at site level, Aligning accounting approaches for nature*, 2023.
- 1647 50. United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC),
 1648 Capitals Coalition, Arcadis, WCMC Europe, International Climate Finance (ICF), Measuring
 1649 Ecosystem Condition A primer for business, Aligning accounting approaches for nature, 2023.
- 1650
 51. United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC),
 1651
 1652
 1653
 1653
 1653
 51. United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC),
 1654
 1655
 1653
 1654
 1655
 1655
 1655
 1656
 1657
 1657
 1658
 1658
 1659
 1659
 1650
 1650
 1650
 1650
 1651
 1651
 1651
 1652
 1653
 1653
 1653
 1654
 1655
 1655
 1655
 1655
 1656
 1657
 1657
 1657
 1658
 1658
 1659
 1659
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 1650
 165
- 1654 52. United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC)
 1655 and the Convention on International Trade in Endangered Species of Wild Fauna and Flora
 1656 (CITES) Secretariat, Species +, https://speciesplus.net/about, accessed on 28 November 2023.
- 1657 53. United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC)
 1658 and International Union for Conservation of Nature (IUCN), Protected planet: The world database
 1659 on protected areas (WDPA), https://www.protectedplanet.net/en/thematic1660 areas/wdpa?tab=WDPA, accessed on 28 November 2023.
- 1661 54. United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC)
 1662 and International Union for Conservation of Nature (IUCN), Protected planet: The World Database
 1663 on other effective area-based conservation measures (WD-OECM),
 1664 https://www.protectedplanet.net/en/thematic-areas/oecms?tab=OECMs, accessed on 28
 1665 November 2023.
- 1666 55. World Bank Group, *Biodiversity Offsets: A user guide*, 2016.
- 1667 56. World Resources Institute (WRI), The Corporate Ecosystem Services Review: Guidelines for
 1668 Identifying Business Risks and Opportunities Arising from Ecosystem Change. Version 2.0., 2012.
- 1669 57. World Wildlife Fund (WWF), Biodiversity Risk Filter, https://riskfilter.org/biodiversity/home,
 accessed on 28 September 2023.
- 1671 Resources:

1672 1673	 European Alien Species Information Network (EASIN), https://easin.jrc.ec.europa.eu/easin/Documentation/Codesofconduct, accessed on 2 October
1674	2023.
1675	59. Partnership for Biodiversity Accounting Financials (PBAF), Taking biodiversity into account, PBAF
1676	Standard v2022, Biodiversity impact assessment - Overview of approaches, 2022.



- 1677 1678
- 60. Science Based Targets Network (SBTN), Step -1 Toolbox, https://sciencebasedtargetsnetwork.org/resources/, access on 23 September 2023.

1679

		6558
		on of the
		alpositio
	* an offic	
	epresent	
Cos S	ot	
umentoc		
This doce		



1680 Appendix

1681 Table 1. Criteria for identifying ecologically sensitive areas

Area	Criteria*				
Biodiversity	Areas protected through legal or other effective means				
importance	Geographically defined areas that are designated or regulated and managed to achieve specific conservation objectives. They include:				
	• Protected areas [53]** (terrestrial, freshwater, and marine) according to local, national, regional, or international conventions and agreements.				
	 Areas conserved through other effective area-based conservation measures (OECMs) [54]. 				
	Examples of protected areas and OECMs are Natural and mixed World Heritage sites [45], Wetlands designated under the Ramsar Convention on Wetlands of International Importance [34], and areas protected under regional seas agreements.				
	Areas scientifically recognized for their importance to biodiversity				
	• Key Biodiversity Areas (KBAs) [29]** – sites significantly contributing to global biodiversity in terrestrial, freshwater, and marine ecosystems. KBAs include Alliance for Zero Extinction sites, Important Bird and Biodiversity Areas, and Important Plant Areas.				
	• Ecologically or Biologically Significant Marine Areas (EBSAs) [14] – special areas in the ocean supporting the healthy functioning of oceans and the many services they provide.				
	Important Marine Mammal Areas [30].				
	Areas important for species				
	Areas important for species include areas with:				
	 threatened species [26]** (critically endangered, endangered, and vulnerable at global, national, or regional levels); 				
	congregatory species;				
ACC.	migratory species;				
-Cr)I	range-restricted species;				
2 ⁰	endemic species.				
~ HIS	Areas important for ecosystems				
	Areas important for ecosystems contain ecosystems that are rare or very localized, highly threatened, important for ecosystem connectivity, or associated with key evolutionary processes.				
	For example, coastal upwellings and seamounts.				
	Areas important for ecological connectivity				
	Areas important for ecological connectivity include important ecological corridors, areas and routes important for seasonal migratory patterns, and				



	areas that provide adaptive space for species to spread across a landscape in the face of changing environmental conditions.						
High ecosystem integrity	Areas of high ecosystem integrity, both on a global scale and in comparison to the surrounding landscape, contain significant opportunities for preserving environmental assets and sustaining local and global ecosystem services.						
Rapid decline in integrity	Areas of rapid decline in integrity are areas with declining resilience of ecosystem service provision, and that are potentially at risk of ecological tipping points. This could include areas that have declined to a low state of integrity.						
Ecosystem service delivery importance	Examples of areas important for the delivery of ecosystem service benefits to stakeholders, including Indigenous Peoples and local communities, include:						
	 areas in which healthy ecosystems and biodiversity support local livelihoods; 						
	 areas that have been traditionally owned, occupied, or otherwise used or acquired by Indigenous Peoples and local communities; 						
	 areas of biocultural importance to Indigenous Peoples and local communities; 						
	 areas in which healthy ecosystems and biodiversity support recreational and cultural services. 						
	Examples of areas of importance to Indigenous Peoples and local communities are:						
	 Indigenous Peoples and Community Conserved Territories and Areas (ICCAs) [47]; 						
	 areas under customary management by Indigenous Peoples and local communities or subject to customary harvest; 						
	• FAO Globally Important Agricultural Heritage Systems [19] are agroecosystems inhabited by communities that have intricate relationships with their territory.						
Water physical risk	Areas of known high physical water risk are areas with limited water availability, flooding, poor quality of water, and marine areas with high levels of land-based pollution.						

* Criteria for identifying ecologically sensitive areas are defined by the *TNFD Guidance on the identification and assessment of nature-related issues: The LEAP approach* [41]. The WWF
 Biodiversity Risk Filter can be used to identify ecologically sensitive areas. The TNFD provides

1685 guidance on additional datasets than can be used to identify these areas.

1686 ** The World Database on Protected Areas, the World Database of Key Biodiversity Areas, and the

1687 IUCN Red List of Threatened Species can be accessed through the Integrated Biodiversity
 1688 Assessment Tool (IBAT) [26] for identifying protected areas, KBAs, and areas with threatened species
 1689 respectively.



1690 Table 2. Methods to measure or estimate ecosystem condition

Methods	Ecosystem type-specific methods	Methods applicable to different types of ecosystems		
Direct measurement of ecosystem condition	Live coral cover Forest canopy density Water quality maintenance	Measured Mean Species Abundance Species diversity		
		ecosystem		
Estimation of ecosystem	Forest Landscape Integrity Index	Ecosystem Integrity Index		
condition		Mean Species Abundance		
		Potentially Disappeared Fraction		
cumentdoe	s not represent an offici			

1691



1692 **Table 3. Example template for presenting information related to an organization's operational**

1693 sites for Disclosures 101-5, 101-6, 101-7, and 101-8

1694Table 3 offers an example of how to present information related to an organization's operational sites1695for Disclosures 101-5, 101-6, 101-7, and 101-8. The organization can amend the table according to its

1696 practices by reporting additional information.

						Site N
Operational sites						
(101-5-a, 101-5-c)			S			
				Activities	C	P
Ecologically	Whether t	he site is in o	or near an ecolo	gically sensitive area		
sensitive areas in or near the operational sites				Distance**	5	
(101-5-b)				Туре***		
Direct drivers of biodiversity	Land and sea use	Natural eco conversion	system	Size of ecosystem converted (Ha)		
IOSS	cnange	(101-6-a-i)		Cut-off date or base year		
				Ecosystem type before conversion		
				Ecosystem type after conversion		
		Conversion from one intensively used or		Size of ecosystem converted (Ha)		
		modified ecosystem to another	Ecosystem type before conversion			
				Ecosystem type after conversion		
	Exploitation	Exploitation of natural resources (101-6-b-i)	Wild	Quantity*****		
	resources) [insert type]	Species extinction risk		
			Wild	Quantity		
			[insert type]	Species extinction risk		
		Water (101-6-b-ii)		Water withdrawal (ML)		
				Water consumption (ML)		
	Pollution	Pollutant 1	[insert type]	Quantity****		
	(101-6-с)	Pollutant 2	[insert type]	Quantity		



	Invasive alien species (101-6-d)	How invasive been introduc				
State of biodiversity	Ecosystem 1	l [insert type] (101-7-a-i)				
			Ecosystem	Base year		
			(101-7-a-iii) Reporting period			0
	Ecosystem 2	2 [insert type]	[insert type] Ecosystem size (Ha)			S
		(101-7-a-i)		(101-7-a-ii)	C	
			Ecosystem	Base year		
			(101-7-a-iii)			
Ecosystem	Ecosystem services (101-8-a)					
Services	Beneficiaries					

- 1697*If the organization uses polygon outlines or maps to report on the location of its operational1698sites, it can include a reference to the polygon outlines or maps in the 'Location' row.
- 1699 ** The organization is required to report the distance only in cases where the ecologically
 1700 sensitive areas are near its operational sites.
- 1701 *** The types of ecologically sensitive areas are: areas of biodiversity importance, areas of high ecosystem integrity, and areas important for delivering ecosystem service benefits to stakeholders.
- 1704 **** The organization needs to report the information only for the direct drivers of biodiversity loss relevant to its activities.
- 1706 ***** The organization should specify the unit of measurement used.



1707 Table 4. Example template for presenting information related to an organization's supply chain

1708 for Disclosures 101-5 and 101-6

1709 Table 4 offers an example of how to present information related to an organization's supply chain for

1710 Disclosures 101-5 and 101-6. The organization can amend the table according to its practices by

1711 reporting additional information.

Products			Product	s and services	Product 1		Service 1	
(101-5-d)					[insert name]		[insert name	2]
	Countries or jurisdictions				Country or jurisdiction 1	Country or jurisdiction N	Country or jurisdiction	Country or jurisdiction N
				[insert name]	[insert name]	[insert name]	[insert name]	
Direct drivers of biodiversity loss*	Land and sea use change	Natural ecosystem conversion		Size of ecosystem converted (Ha)				
(101-6-e)				Cut-off date or base year	ositi			
				Ecosystem type before conversion	101			
				Ecosystem type after conversion				
		Conversion from one intensively used or modified ecosystem to another		Size of ecosystem converted (Ha)				
				Ecosystem type before conversion				
				Ecosystem type after conversion				
	Exploitation of natural	Wild Species	Wild species 1 [insert type]	Quantity**				
	resources			Species extinction risk				
			Wild species	Quantity				
		2 [ii ty	2 [insert type]	Species extinction risk				
		Water		Water withdrawal (ML)				
				Water consumption (ML)				



Pollution	Pollutant 1 [insert type]	Quantity**		
	Pollutant 2 [insert type]	Quantity		
Invasive alien species	How invasive alien species are or may have been introduced			

- .versity le essential position of the essent 1712 1713
- 1714

