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Date
October 22, 2024

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2. of Mr. Christof Martin,
3. of Mr. Hannes Jaenicke,
4. Mrs. Jutta Wieding,
5. Mrs. Henriette Schwabe,
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- Complainant

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**Prof. Dr. Dr. Felix Ekardt, LL.M., M.A., Könnertitz-
straße 41, 04229 Leipzig (by proxy)**

vs.

**the Federal Republic of Germany's failure to enact suitable legal provisions relating to the
conservation of biodiversity**

regarding

**Violation of the fundamental right to life and physical integrity under Art. 2 para. 2 sen-
tence 1 Grundgesetz (GG)**

Violation of the fundamental right to property under Art. 14 para. 1 GG

**Violation of the required intertemporal safeguarding of freedom from the rights of free-
dom**

We indicate that the complainants have commissioned us to represent their legal interests. We **enclose** the powers of attorney in our name as **Annexes BF 1 to BF 8** and the sub-authorization for Prof. Dr. Dr. Felix Ekardt as **Annex BF**

It is **requested**,

- I. that the German Bundestag and the German Bundesrat have not created a comprehensive legal protection concept for the preservation of biodiversity, insofar as this is necessary for the protection of freedom, life, health and the preservation of the natural basis of life for future generations.**

and thereby violated the fundamental rights of the complainants.

It is also **requested**,

- II. order the legislator to regulate a comprehensive statutory protection concept for the preservation of biodiversity in accordance with the grounds of the judgment within a period to be determined by the Federal Constitutional Court,**

Justification

The constitutional complainants complain that the German legislator has not yet taken any suitable measures to ensure that the fundamental rights of the complainants under Article 2 (2) sentence 1 of the Basic Law (right to life and health) and Article 14 (1) of the Basic Law (right to property) as well as from the rights of freedom in their intertemporal dimension developed by the Federal Constitutional Court in its decision of 24.03.2021 (1 BvR 2656/18 et al, BVerfGE 157, 30) cannot be violated by the consequences of an ever-increasing loss of biodiversity.

Part 1 - Facts of the case

In the following, we first present the relevant facts from the complainants' point of view. In a first step, this includes the international obligations entered into by the Federal Republic of Germany as well as the facts on biodiversity loss (see Part 1 A. below). It is then explained that and why the strategies and legal provisions to date are not suitable for ensuring the conservation of biodiversity (see Part 1 B. below). Finally, we explain to the BVerfG the personal situation of the complainants and how their fundamental rights are affected by the legislative omission complained of here, or comment on the extent to which (based on BVerfGE 157, 30 et seq.) this is - not - relevant in the present case (see Part 1 C. below).

A. Status of biodiversity loss and Germany's international and supranational commitments to combat it

First, we present the underlying facts on biodiversity loss for the complainants, including Germany's obligations under international law.

I. Scientific knowledge on the loss of biodiversity

In view of the (strict) presentation requirements of the BVerfG pursuant to Art. 93 Para. 1 No. 4a GG in conjunction with Sections 13 No. 8a et seq. §§ Sections 13 no. 8a, 90 et seq. BVerfGG and taking into account the fact that the scientific findings on the loss of biodiversity may not yet be known to the courts, we first present the current state of scientific knowledge, including the actual effects of the loss of biodiversity on fundamental rights guarantees, in more detail.

1. Importance of biodiversity and its ecosystem services

The common definition of the term biodiversity or biological diversity (introduced by Lovejoy, in Barney [ed.], The Global 2000 Report to the President 1980, p. 327, see also

Swingland, in Levin (ed.), Encyclopedia of Biodiversity, 2013, p. 399) is derived from Art. 2 of the Convention on Biological Diversity (CBD). According to this

"biological diversity means the variability among living organisms from all sources, including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part: this includes diversity within species, between species and of ecosystems".

Biodiversity therefore comprises three levels: genetic variation within species, the richness of species and the diversity of ecosystems. Genetic diversity refers to the degree of variability and variance within and between species, in particular the different variants of a gene (alleles). Different alleles often result in different manifestations of the trait corresponding to the gene in the appearance (phenotype) of the individual (cf. only Wilson, Biodiversity: challenge, science, opportunity, American Zoologist 1994, 5; Ledig, Human impacts on genetic diversity in forest ecosystems, Oikos 1992, 87, see also Swingland, in: Levin (ed.), Encyclopedia of Biodiversity, 2013, p. 399; Wittig/Niekisch, Biodiversität: Grundlagen, Gefährdung, Schutz, 2014).

As mentioned, biodiversity also refers to the variety and richness of species. In 2021, the Red List of the International Union for Conservation of Nature (IUCN) listed 2.13 million described species. However, estimates of this total number on Earth vary between a few million and 100 million (Swingland, in: Levin (ed.), Encyclopedia of Biodiversity, 2013, p. 399; Mora/Tittensor, Adl et. al, How many species are there on earth and in the ocean? PLoS Biology 2011, 1001127; Ritchie, How many species are there? <https://ourworldindata.org/how-many-species-are-there>) .

The diversity of ecosystems goes beyond individual species and encompasses the diversity of communities of organisms in specific habitats and the physical conditions under which they live (cf. Swingland, in: Levin (ed.), Encyclopedia of Biodiversity, 2013, p. 399) .

These levels of biodiversity are interlinked. Firstly, genetic diversity is the prerequisite for evolution and thus for the diversity and richness of species. Secondly, ecosystems serve as habitats for species and thus influence biodiversity. Finally, biodiversity in turn affects ecosystems (general view, cf. only Wenger, Biodiversität. A successful marketing instrument in nature conservation? The example of the regional brand "Albgemacht", 2019; Federal Agency for Nature Conservation, Artenschutz-Report 2015; Bairey/Kesic/Kishony, High-order species interactions shape ecosystem diversity, Nature Communications 2016, 12285; Vellend/Geber, Connections between species diversity and genetic diversity, Ecology Letters 2005, 767; Hughes/Inouye/Johnson et al, Ecological consequence of genetic diversity, Ecology Letters 2008, 609; Booy/Hendriks/Smulders et al, Genetic diversity and the survival of populations, Plant Biology 2000, 379; Bardgett/van der Putten, Belowground biodiversity and ecosystem functioning, Nature 2014, 505) .

There is a broad scientific consensus that biodiversity has a fundamentally positive and stabilizing effect on ecosystems.

B e w e i s :

1. Bairey/Kesic/Kishony, High-order species interactions shape ecosystem diversity, Nature Communications 2016, 12285 as **Annex BF 10**

2. Bardgett/van der Putten, Belowground biodiversity and ecosystem functioning, Nature 2014, 505 as **Annex BF 11**

3 Landi/Minoarivelo/Brännström et al, Complexity and stability of ecological networks: a review of the theory, Population Ecology 2018, 319 as **Annex BF 12**

4 Johnson/Vogt/Clark et al, Biodiversity and the productivity and stability of ecosystems, Trends in Ecology & Evolution 1996, 372 as **Annex BF 13**

5 Hooper/Chapin/Ewel et al, Effects of biodiversity on ecosystems functioning: a consensus of current knowledge, Ecology Monographs 2005, 3 as **Annex BF 14**

6 Lefcheck/Byrnes/Isbell et al, Biodiversity enhances ecosystems multifunctionality across trophic levels and habitats, Nature Communications 2015, 6936 as **Annex BF 15**

7 Swift/Izac/van Noordwijk, Biodiversity and ecosystem services in agricultural landscapes - are we asking the right questions? Agriculture, Ecosystems & Environment 2004, 113 as **Annex BF 16**

8 Hooper/Adair/Cardinale et al, A global synthesis reveals biodiversity loss as a major driver of ecosystem change, Nature 2012, 105 as **Annex BF 17**

At the same time, biodiversity is identified as a planetary boundary that, if exceeded, increases the vulnerability of ecosystems to harmful or catastrophic changes.

Beweis:

1 Rockström/Steffen/Noone et al, [Planetary boundaries: exploring the safe operating space for humanity](#), Ecology & Society 2009, 2 as **Annex BF 18**

2 Steffen/Richardson/Rockström et al, [Planetary boundaries: guiding human development on a changing planet](#), Science 2015, 1259855 as **Annex BF 19**

3 Rockström/Gupta/Quin et al, Safe and just earth system boundaries, Nature 2023, 102 as **Annex BF 20**

The concept of planetary boundaries is recognized in the scientific community and states that ecological boundaries exist in the form of the Earth's stress limits, which, if exceeded, endanger the stability of the Earth's ecosystem and thus the progress or even the survival of humanity, as explained in detail in Part 1 A. I. 5. is explained in detail. The Senate has

already implicitly recognized this concept (BVerfGE 157, 30, para. 198).

By contributing to functioning ecosystems, biodiversity provides a number of essential services to living organisms, such as ensuring the resilience and stability of ecosystems, regulating the climate, pollinating food production, keeping air and water clean, enabling soil formation and protecting against natural disasters such as flooding and erosion.

B e w e i s :

1. TEEB, [The economics of ecosystems and biodiversity](#), Synthesis Report 2012 (German version) as **Annex BF 21**

2 IPBES, [The Global Assessment of Biodiversity and Ecosystem Services](#), Summary for Policy Makers, 2019, p. 10 et seq. as **Annex BF 22**

3 UNEP, [Global Environment Outlook - GEO-6: Summary for Policymakers](#), 2019 as **Annex BF 22 b**

4 Giller/O'Donovan, [Biodiversity and ecosystem function: do species matter?](#), Biology & Environment: Biology and Environment: Proceedings of the Royal Irish Academy 2002, 129 as **Annex BF 23**

5 Martin/Watson, [Intact ecosystems provide best defense against climate change](#), Nature Climate Change 2016, 122 as **Annex BF 24**

6 Cardinale/Duffy/Gonzalez et al, [Biodiversity loss and its impact on humanity](#), Nature 2012, 59 as **Annex BF 25**

The importance of biodiversity for humans and the need to conserve it, particularly in the vital interest of humans, is therefore derived from ecosystem services, i.e. the benefits that humans derive from ecosystems. Ecosystem services can be divided into provisioning services (food, water, etc.), regulating services (protection against flooding and disease, climate regulation, safeguarding water quality), cultural services (promotion and facilitation of recreation, nature tourism, aesthetic or spiritual experiences, inspiration) and supporting services (soil formation, maintenance of the nutrient cycle, preservation of genetic diversity, primary production through photosynthesis, whereby these supporting services are again elementary for safeguarding the food supply). **These ecosystem services are therefore inextricably linked to human nutrition, for example, and thus also to life, health and the foundations of any exercise of human freedom, as will be discussed in more detail when the consequences of biodiversity loss for humans are explained in more detail (see Part 1 A. I. 4.), and some of them cannot be replaced completely and some cannot be replaced at all.**

B e w e i s :

IPBES, [The Global Assessment of Biodiversity and Ecosystem Services](#), Summary for Policy Makers, 2019, p. 10 and passim as **Annex BF 22**

The importance and status quo of biodiversity and its decline are very clearly described in research and especially in the statements of the IPBES, which assumes the role in the biodiversity sector that the IPCC has in the climate sector, just as climate change is officially documented in the IPCC reports. According to the IPBES, the contributions of nature to people, including ecosystem services, are essential for their livelihoods, for the economy, for health and for a good quality of life; accordingly, they are a prerequisite for the preservation of human life on earth.

B e w e i s : IPBES, [The Global Assessment of Biodiversity and Ecosystem Services](#), Summary for Policy Makers, 2019, p. 10 et seq. as Annex BF 22

In detail, at least ten regulating contributions of nature to human life can also be identified for Europe and Germany, as well as other contributions of nature to human life, namely:

- Conservation of natural habitats
- Pollination
- Regulation of air quality
- Regulation of the climate
- Regulation of ocean acidification
- Regulation of the amount of fresh water
- Regulation of freshwater quality
- Bottom formation
- Regulation of hazards
- Regulation of organisms harmful to humans

B e w e i s : IPBES, [Biodiversity and Ecosystem Services in Europe and Central Asia](#), Summary for Policy Makers, 2021, p. 15 and 25 as **Annex BF 26**

In material terms, nature provides contributions in the form of food and fodder, energy, materials and support, as well as in the form of sources of healing. Intangible ecosystem services such as learning experiences and inspiration, physical and psychological experiences, the promotion of identity and the preservation of options are also provided. A decline or even a lack of these ecosystem services jeopardizes the security of food, energy and water supplies, as well as physical, mental and spiritual health, cultural heritage and human identity - all of which are particularly at risk in Europe.

B e w e i s : IPBES, [Biodiversity and Ecosystem Services in Europe and Central Asia](#), Summary for Policy Makers, 2021, p. 15, Fig. 2 as Annex BF 26

Nature's contributions to mankind are threatened by the ongoing decline in biodiversity. The ongoing decline in biodiversity has already impaired the availability of numerous ecosystem services over the past decades. These negative consequences affect the conservation of natural habitats, pollination, the regulation of freshwater quantity and quality, soil formation and flood regulation, especially in Europe.

B e w e i s : IPBES, [Biodiversity and Ecosystem Services in Europe and Central Asia](#), Summary for Policy Makers, 2021, p. 10 as Annex BF 26

2. Status quo of the loss of biodiversity

Overall, the IPBES reports provide a comprehensive picture of biodiversity loss. World-wide, biodiversity has declined at an unprecedented rate, "faster than ever before in human history" - **more precisely, the rate is about 100 times, perhaps even 1000 times, the biologically normal extinction rate of species.** The current extinction rate is conservatively calculated at over 100 E/MSY (extinctions per million species/ years).

B e w e i s :

1. Rockström et al, Safe and just Earth system boundaries, Nature 2023, 102 et seq. as Annex BF 20
2. Ceballos/Ehrlich/Barnosky et al, [Accelerated modern human-induced species losses: entering the sixth mass extinction](#), Science Advances 2015, 1400253 as **Annex BF 27**
3. Pimm/Jenkins/Abell et al, [The biodiversity of species and their rates of extinction, distribution, and protection](#), Science 2014, 1246752 as **Annex BF 28**
4. Barnosky/Hadly/Bascompte et al, [Approaching a state shift in Earth's biosphere](#), Nature 2014, 52 as **Annex BF 29**

Because of this serious decline, the development is referred to as the sixth mass extinction in the history of the earth.

B e w e i s :

1. IPBES, [The Global Assessment of Biodiversity and Ecosystem Services](#), Summary for Policy Makers, 2019, p. 11 et seq. as Annex BF 22
- 2 Rockström/Steffen/Noone et al, [Planetary boundaries: exploring the safe operating space for humanity](#), Ecology & Society 2009, 2 as Annex BF 18

3 Secretariat of the CBD, [Global Biodiversity Outlook 5](#), 2020 as **Annex BF 30**

4 Ceballos/Ehrlich/Barnosky et al, [Accelerated modern human-induced species losses: entering the sixth mass extinction](#), Science Advances 2015, 1400253 as Annex BF 27

5 Hallmann/Sorg/Jongejans et al, [More than 75 percent decline over 27 years in total flying insect biomass in protected areas](#), PLoS ONE 2017, 0185809 as **Annex BF 31**

6 Lister/Garcia, [Climate-driven declines in arthropod abundance restructure a rainforest food web | PNAS](#), PNAS 2017, E10397 as **Appendix BF 32**

Almost half of the world's natural ecosystems have deteriorated in recent decades. 25% of animal and plant species, around one million species, are threatened with extinction, many of them within a few decades (Tollefson, Nature 2019, 171). Biodiversity in Europe in particular is declining steadily and rapidly:

B e w e i s : IPBES, [Biodiversity and Ecosystem Services in Europe and Central Asia](#), Summary for Policy Makers, 2021, p. 10 as Annex BF 26

This general finding for species as a whole has been well studied and documented for individual species groups, such as vertebrates,

B e w e i s : Ceballos/Ehrlich/Raven, [Vertebrates on the brink as indicators of biological annihilation and the sixth mass extinction, PNAS](#) 2020, 13596 as **Annex BF 33**

specific for carnivores,

B e w e i s : Ripple/Estes/Beschta et al, [Status and ecological effects of the world's largest carnivores](#), Science 2014, 1241484 as **Annex BF 34**,

for pollinators and insects in general (with a decline of over three quarters in the last three decades, as confirmed by the German government www.bmu.de/faq/was-steht-in-der-krefelder-studie),

B e w e i s : 1. Hallmann/Sorg/Jongejans et al, [More than 75 percent decline over 27 years in total flying insect biomass in protected areas](#), PLoS ONE 2017, 0185809 as Annex BF 31

2. Hunting/England/Koh et al, [Synthetic fertilizers alter floral biophysical cues and bumblebee foraging behavior, PNAS](#) 2022, 230 as **Appendix BF 35**

3. Rumohr et al, [Drivers and pressures behind insect decline in Central and Western Europe based on longterm monitoring data](#), Plos One 2023, 10.1371/journal.pone.0289565 as **Annex BF 36**

for mammals and birds,

B e w e i s :

Ceballos/Ehrlich, [Mammal population and the extinction crisis](#), Science 2002, 904 as **Annex BF 37**

for plants in general

B e w e i s :

1. Le Roux/Leishman/Cinantya et al, [Plant biodiversity in the face of global change](#), Current Biology 2020, R390 as **Annex BF 38**
- 2 Le Roux/Hui/Castillo et al, [Recent anthropogenic plant extinctions differ in biodiversity hotspots and coldspots](#), Current Biology 2019, 2912 as **Annex BF 39**

and for marine plants and animals.

B e w e i s :

1. Elahi/O'Connor/Byrnes et al, [Recent trends in local-scale marine biodiversity reflect community structure and human impacts](#), Current Biology 2015, 1938-1943 as **Annex BF 40**
2. Dulvy/Sadovy/Reynolds, [Extinction vulnerability in marine populations](#), Fish and Fisheries 2003, 25 as **Annex BF 41**
- 3 McCauley/Pinsky/Palumbi et al, [Marine defaunation: animal loss in the global ocean](#), Science 2015, 1255641 as **Annex BF**

In addition to biotic factors such as animals or plants, the biodiversity of soils (soil biodiversity), which are often regarded as abiotic factors, and their functions, which in turn are indispensable as an existential basis for animals and plants and thus for human food production, etc., are also declining.

B e w e i s :

1. Bardgett/van der Putten, [Belowground biodiversity and ecosystem functioning](#), Nature 2014, 505 as Annex BF 11
- 2 Wagg/Bender/Widmer/van der Heijden, [Soil biodiversity and soil community determine ecosystem multifunctionality](#), PNAS 2014, 5266 as **Annex BF**

As far as ecosystems are concerned, more than 70 % of the global land surface has been significantly altered. In Europe, for example, the area of wetlands has decreased by 50 % since 1970.

B e w e i s :

1. IPCC, Climate Change and Land: An IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems, 2019 as **Annex BF 44**

2 IPBES, [Biodiversity and Ecosystem Services in Europe and Central Asia](#), Summary for Policy Makers, 2021, p. 10 as Annex BF 26

3. Watson/Shanahan/Di Marco et al, [Catastrophic declines in wilderness areas undermine global environment targets](#), Current Biology 2016, 2929 as **Annex BF 45**

At the same time, 66% of the world's oceans are affected, and the trend is increasing.

B e w e i s : Halpern/Longo/Lowndes et al, [Patterns and emerging trends in global ocean health](#), PLoS ONE 2015, e0117863 as **Annex BF 46**

Since the pre-industrial era, as much as 85% of all wetlands have been lost, while half of all previously existing forests have disappeared since the 1870s.

B e w e e l : 1 Davidson, [How much wetland has the world lost? Long-term and recent trends in global wetland area](#), Marine & Freshwater Research 2014, 934 as **Annex BF 47**

2 Ekardt/Jacobs/Stubenrauch/Garske, [Peatland governance: the problem of depicting in sustainability governance, regulatory law, and economic instruments](#), Land 2020, 83 as **Annex BF 48**

3 Stubenrauch et al, [European Forest Governance](#), Sustainability 2022, 4365 as **Annex BF 49**

These degradation rates have accelerated in recent decades due to climate change. It is estimated that most important terrestrial biomasses have declined by at least 20 % since 1900, with a further acceleration assumed. The biomass of the world's vegetation has halved over the course of human history. Meanwhile, the biomass of humans and their domesticated animals is significantly higher than the biomass of all other wild mammals that have to compete with them for space and resources.

B e w e i s : 1. Bar-On/Phillips/Milo, [The biomass distribution on Earth](#), PNAS 2018, 6506 as **Annex BF 50**

2 Ceballos/Ehrlich/Barnosky et al, [Accelerated modern human-induced species losses: entering the sixth mass extinction](#), Science Advances 2015, 1400253 as Annex BF 27

Recent studies on the status of insect or bird species, which can serve as indicator species, unanimously confirm a formal collapse of biodiversity.

- B e w e i s :
- 1 Hallmann/Sorg/Jongejans et al, [More than 75 percent decline over 27 years in total flying insect biomass in protected areas](#), PLoS ONE 2017, 0185809 as Appendix BF 31
 2. Wagner/Grames/Forister et al, [Insect decline in the Anthropocene: death by a thousand cuts](#), PNAS 2021, e2023989118 as **Annex BF 51**
 - 3 Warren/Maes/van Swaay et al, [The decline of butterflies in Europe: problems, significance, and possible solutions](#), PNAS 2021, e20025 51117 as **Annex BF 52**
 - 4 Köthe/Schneider/Bakanov et al, [Improving insect conservation management through insect monitoring and stakeholder involvement](#), Biodiversity and Conservation 2022, 691 as **Annex BF 53**
 - 5 Redhead/Hinsley/Botham et al, [The effects of a decade of agri-environment intervention in a lowland farm landscape on population trends of birds and butterflies](#), Journal of Applied Ecology 2022, 2486 as **Annex BF 54**

Biodiversity and climate change interact strongly in all of this, because intact ecosystems such as peat bogs, forests or soils under grassland can also store more greenhouse gases. As will be shown below (see Part 1 A. I. 3.), the drivers of biodiversity loss and climate change are also closely linked. All of this is relevant because on this basis - in addition to a direct derivation via biodiversity - a protective effect from human rights-based climate protection may also be indicated indirectly.

- B e w e i s :
- IPBES/ IPCC, [Biodiversity and Climate Change](#), 2021 as **Annex BF 55**

Although biodiversity, interactions within ecosystems, between different ecosystems and the effects of changes in ecosystems or in biodiversity on the provision of ecosystem services are characterized by heterogeneity and complex and dynamic cause-effect relationships, this does not change the conditions described.

- B e w e i s :
1. Cardinale/Duffy/Gonzalez et al, [Biodiversity loss and its impact on humanity](#), Nature 2012, 59 as **Annex BF 56**
 - 2 TEEB, [The economics of ecosystems and biodiversity](#), Synthesis Report 2012 (German version) as Annex BF 21
 - 3 Spangenberg/Settele, [Precisely incorrect? Monetizing the value of ecosystem services](#), Ecological Complexity 2010, 327 as **Annex BF 57**

The German Advisory Council on the Environment (SRU), to which the Senate made central reference in the climate decision for factual questions (BVerfGE 157, 30), describes all this and thus the current state of biodiversity in its statement of April - or updated without major changes in August - 2024 together with the Scientific Advisory Council on Biodiversity and Genetic Resources (WBGGR) and the Scientific Advisory Council on Forest Policy (WBW), which are also government-appointed bodies, specifically for Germany as follows (emphasis not in original):

"Ecosystems are being altered, damaged, disturbed or eliminated over ever larger areas. Both the biotic composition of habitats and the ecosystem functions and services associated with them as well as abiotic conditions such as temperature and water availability are changing due to human influence. In addition, the input of pollutants is increasing. In Europe, 81 % of the habitat types of the Habitats Directive 92/43/EEC (Habitats Directive) are now in a poor condition Around 19 % of European animal and plant species whose endangered status can be assessed are threatened with extinction In Germany, the status of 63 % of FFH species and 69 % of FFH habitat types is classified as "unfavorable-insufficient" or "unfavorable-poor" ... and only 9 % of surface waters are in a "very good" or "good" ecological status"

B e w e i s : SRU/ WBBGR/ WBW, [Renaturierung: Biodiversität stärken, Flächen zukunftsfähig bewirtschaften](#), Statement April/ August 2024 as **Annex BF 58**, p. 11 et seq.

For this statement on the status quo of biodiversity loss, but also for the analyses of anthropogenic causes and serious consequences of biodiversity loss presented in the following sections, it can already be said here: For reasons of practicability, the SRU/ WBBGR/ WBW report is quoted here in particular - following the climate resolution - but a number of other official advisory councils come to identical conclusions. **This is because all these problems and consequences have also been addressed by official advisory bodies for a long time (at the latest since SRU, Special Report: Umweltprobleme der Landwirtschaft, 1985), without the Federal Government and the Bundestag having taken this up.**

B e w e i s : 1. German Council for Sustainable Development, [Improvement requirement for biodiversity](#), 2022 as **Annex BF 59**

2 Scientific Advisory Council on Biodiversity and Genetic Resources, [How policy-makers can respond to the threat to biodiversity in agricultural landscapes posed by climate change](#), 2022 as **Annex BF 60**

3 Scientific Advisory Council on Global Change, [Biodiversity: Acting urgently now for nature and people](#), 2024 as **Annex BF 61**

All of this, and therefore the dramatic decline in species, can also be seen in the aforementioned Red Lists. The Red List of Animals, Plants and Fungi of Germany is published by the Federal Agency for Nature Conservation. Its compilation is coordinated by the Red List

Center on behalf of and under the technical supervision of the Federal Agency for Nature Conservation.

- B e w e i s :
1. Red list of threatened species of the IUCN, IUCN, IUCN (red list of threatened species), 2022, <https://www.iucnredlist.org/>
 2. Red lists of threatened species groups in Germany, available at

The fact that federal government documents confirm and further specify all of this becomes clear below in the presentation of the federal government's nature conservation strategies (see Part 1 B. I. below).

3. Anthropogenic causes of biodiversity loss

Despite the uncertainty about the exact evolution of biodiversity, it is indisputable and obvious that the unprecedented extinction of species that has been going on for some time is caused by humans, and the pressures driving this decline are intensifying.

- B e w e i s :
1. IPBES, [The Global Assessment of Biodiversity and Ecosystem Services](#), Summary for Policy Makers, 2019, p. 11 et seq. and passim as Annex BF 22
 2. IPBES, [Biodiversity and Ecosystem Services in Europe and Central Asia](#), Summary for Policy Makers, 2021, p. 10 and passim as Annex BF 26
 3. Secretariat of the CBD, [Global Biodiversity Outlook 5](#), 2020 as Annex BF 30
 4. Ceballos/Ehrlich/Raven, [Vertebrates on the brink as indicators of biological annihilation and the sixth mass extinction, PNAS](#) 2020, 13596 2020, 13596 as Annex BF 33

This can be attributed to a number of causes of change in nature, which are often differentiated: Agriculture, land and sea use change, direct exploitation of organisms, climate change (which is both a cause of biodiversity loss and in turn accelerated by degraded ecosystems), pollution and invasive alien species.

- B e w e i s :
1. IPBES, [The Global Assessment of Biodiversity and Ecosystem Services](#), Summary for Policy Makers, 2019, p. 10 et seq. as Annex BF 22
 2. IPBES, [Biodiversity and Ecosystem Services in Europe and Central Asia](#), Summary for Policy Makers, 2021, p. 11 and passim as Annex BF 26

The anthropogenic causes of biodiversity loss are also highlighted in the SRU/ WBBGR/ WBW report:

"The degradation of ecosystems is the result of forms of land use, land use changes and intensification in agriculture, forestry and fisheries, as well as the increase in settlement and transportation areas. These factors directly related to land use are exacerbated by eutrophication, pollutant inputs, invasive species and climate change."

B e w e i s : SRU/ WBBGR/ WBW, [Statement April/ August 2024](#), p. 9 as Annex BF 58

These direct triggers result from the underlying causes, the indirect triggers of change. A doubling of the human population, a quadrupling of the global economy and a tenfold increase in global trade in the last 50 years have led to an increasing demand for energy, food and materials.

B e w e i s : IPBES, [The Global Assessment of Biodiversity and Ecosystem Services](#), Summary for Policy Makers, 2019, p. 13 et seq. as Annex BF 22

All of this applies both generally and specifically to densely populated, highly industrialized Germany and can be described in more detail as follows for the particularly important factors of agriculture (which also accounts for a significant proportion of land use changes and environmental pollution, for example in the form of pesticides), climate change and invasive species:

a Intensified land use and other land use changes and environmental pollution

Just over half of Germany's land area is used for agriculture, and just under a third is forested. Around 70 % of the agricultural land in Germany is arable land, around 29 % grassland; permanent crops such as fruit or wine account for only around 1 %. For decades, this has been characterized by ever larger arable areas with the removal of biodiversity-relevant small-scale structures such as hedges, the draining of moors, increasing monocultures, the increasing use of large machinery, the conversion of grassland or pastureland into fodder cultivation areas and the increased use of fertilizers and pesticides (especially against the increased occurrence of pests typical of monocultures), each of which has an unfavourable effect on biodiversity and surrounding ecosystems. These areas are used to produce fodder, food and energy crops, with around three times as much land being used for fodder as for direct food or energy and industrial crops (also summarized for lawyers in Wolf, NuR 2023, 6 et seq.).

B e w e i s : SRU/ WBBGR/ WBW, [Statement April/ August 2024](#) as Annex BF 58, p. 21 and passim

However, in addition to increasing yields, this increasingly intensive use of land has also led to greater damage to soils, groundwater, habitats and species. In conjunction with climate change-related events such as drought or heavy rainfall, there is an

increasing risk that agriculture and forestry will no longer be able to ensure the supply of important goods and provide certain services. The decline in pollinating insects such as bees and butterflies has already led to considerable crop losses.

- B e w e i s :
1. SRU/ WBBGR/ WBW, [Statement April/ August 2024](#) as Annex BF 58, p. 21
 2. Stubenrauch et al, [European Forest Governance](#), Sustainability 2022, 4365 as Annex BF 49
 3. Bardgett/van der Putten, [Belowground biodiversity and ecosystem functioning](#), Nature 2014, 505 as Annex BF 11

Ultimately, all impacts associated with agriculture are largely caused by livestock farming, as around 75% of the world's agricultural land is used directly or indirectly for livestock farming.

- B e w e i s :
- Weishaupt et al, [Land use, livestock, quantity governance, and economic instruments - sustainability beyond big livestock herds and fossil fuels](#), Sustainability 2020, 2053 as **Annex BF 61 b**

Both in animal feed production and beyond, the widespread use of pesticides and other agricultural chemicals such as synthetic fertilizers is centrally linked to biodiversity loss.

- B e w e i s :
1. IPBES, [The Global Assessment of Biodiversity and Ecosystem Services](#), Summary for Policy Makers, 2019, p. 13 et seq. as Annex BF 22
 2. Hunting/England/Koh et al, [Synthetic fertilizers alter floral biophysical cues and bumblebee foraging behavior](#), PNAS 2022, 230 as Appendix BF 35
 3. Köthe/Schneider/Bakanov et al, [Improving insect conservation management through insect monitoring and stakeholder involvement](#), Biodiversity and Conservation 2022, 691 as Annex BF 53

The direct exploitation of biodiversity resources - and the overexploitation of them - occurs in agriculture in its current form, which is extremely land-intensive due to the high proportion of animal-based foods. This applies to harvesting, deforestation, hunting and fishing. With regard to marine ecosystems, fishing in particular has a serious impact on biodiversity as a form of direct exploitation.

- Beweis :
1. IPBES, [The Global Assessment of Biodiversity and Ecosystem Services](#), Summary for Policy Makers, 2019, p. 15 as Annex BF 22
 2. Dulvy/Sadovy/Reynolds, [Extinction vulnerability in marine populations](#), Fish and Fisheries 2003, 25 as Annex BF 41

The SRU/ WBBGR/ WBW report underlines all of this once again when it names the causes of biodiversity loss, particularly with regard to agriculture:

"The main reason for this is the change in land use (...) On the one hand, agricultural use in particular has become more intensive since the middle of the 20th century. For example, inputs of fertilizers and pesticides have increased, crop rotations have become narrower and the proportion of landscape elements such as hedges has decreased. On the other hand, extensive agricultural use has been completely abandoned in some places - with negative consequences for the diversity of landscapes and habitats. At the same time, settlement and traffic areas have increased, and the ecological and climate-adapted conversion of the forest takes a long time to become effective (...)"

- Beweis :
- SRU/ WBBGR/ WBW, [Statement April/ August 2024](#) as Annex BF 58, p. 12

In particular, factors that are driven by or related to fossil fuels play a major role, including in agriculture in the form of fossil-based (nitrogen) fertilization, the use of large agricultural machinery, climate change (on this separately in the next section) and more. In addition to agriculture, this also applies, for example, to urbanization, which is also detrimental to biodiversity and has led to a doubling of urban areas since 1992. An expanding infrastructure has led to a change in land use. These developments can in turn be linked to the human population and consumption patterns.

- Beweis :
- IPBES, [The Global Assessment of Biodiversity and Ecosystem Services](#), Summary for Policy Makers, 2019, p. 13 et seq. as Annex BF 22

Land (re)use in particular generally goes hand in hand with the loss of natural habitats. This applies to agriculture in view of its very high land requirements - due to the high level of animal food production - but it also applies to other land use changes, for example in favor of settlement and transport areas. The SRU/ WBBGR/ WBW report states the following specifically for the situation in Germany:

"Settlement and transportation areas in Germany have been growing for decades, currently by 55 ha per day (four-year average for the years 2018 to 2021, see Federal Statistical Office 2023a). This is happening primarily at the expense of agricultural land. In addition, this new land take also reduces the land potential for alternative uses or uses combined with agriculture, including renaturation measures. The German sustainability strategy sets the goal of limiting the use of additional land for settlement and transportation purposes to an average of less than 30 hectares per day by 2030 (Federal Government 2021). However, the fact that a similar target (maximum 30 ha per day) was already clearly missed

in 2020 has not yet led to a real prioritization of land conservation."

B e w e i s : SRU/ WBBGR/ WBW, [Statement April/ August 2024](#) as Annex BF 58, p. 23

Even beyond agriculture, air, water and soil pollution is constantly increasing, e.g. through untreated/untreated urban and rural waste, plastic pollution, pollutants from industry, mining and agriculture, oil pollution and toxic waste disposal. As a result, the quality of soil, fresh and salt water is declining. Here too, pollution is a factor that is largely caused directly or indirectly by fossil fuels (and livestock farming).

B e w e i s : 1. IPBES, [The Global Assessment of Biodiversity and Ecosystem Services](#), Summary for Policy Makers, 2019, p. 14 as Annex BF 22

2. Speißer/Wilschut/van Kleunen, [Number of simultaneously acting global change factors affects composition, diversity and productivity of grassland plant communities](#), Nature Communications 2022, 7811 as **Annex BF 62**

b Exacerbation of biodiversity loss due to climate change - and vice versa

Another factor of global natural change caused by fossil fuels and excessive livestock farming is climate change, as mentioned above. It is a risk multiplier that exacerbates the effects of other factors - and in turn is driven by the destruction of ecosystems (see also recitals 16 to 18 of Regulation (EU) 2024/1991 of the European Parliament and of the Council of June 24, 2024 on nature restoration and amending Regulation (EU) 2022/869 - hereinafter Nature Restoration Law).

B e w e i s : 1. SRU/ WBBGR/ WBW, [Statement April/ August 2024](#), p. 12 as Annex BF 58

2. Boyd, [Human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment](#), 2020 as **Annex BF 63**

The scientific community agrees that climate change affects many aspects of biodiversity, e.g. species distribution, phenology, population dynamics, community structure and ecosystem function. And this change due to climate change is currently increasing more and more.

B e w e i s : 1. IPBES, [The Global Assessment of Biodiversity and Ecosystem Services](#), Summary for Policy Makers, 2019, p. 15 as Annex BF 22

2 IPBES, [Biodiversity and Ecosystem Services in Europe and Central Asia](#), Summary for Policy Makers, 2021, p. 11 as Annex BF 26

3. Lister/Garcia, [Climate-driven declines in arthropod abundance restructure a rainforest food web](#), PNAS 2017, E10397 as Appendix BF 32

4. Strona/Bradshaw, [Coextinctions dominate future vertebrate losses from climate and land use change](#), Science Advances 2022, 4345 as **Annex BF 64**

c Increase in invasive species and their impact

In addition, there is an unprecedented and ongoing increase in invasive species in the global natural environment, which is having an increasingly negative impact on native biodiversity, again driven by climate change as well as the globalized economy and modern mobility powered by fossil fuels.

Beweis: SRU/ WBBGR/ WBW, [Statement April/ August 2024](#), p. 12 as Annex BF 58

Since 1980, the number of recorded alien species has increased by 40 %. This invasion of plants and animals threatens almost a fifth of the earth's surface. Alien species often have a negative impact on native species, the functions of ecosystems and the positive impact of nature on humans, including the economy and human health.

Beweis: 1. IPBES, [The Global Assessment of Biodiversity and Ecosystem Services](#), Summary for Policy Makers, 2019, p. 15 as Annex BF 22

2. IUCN, [IUCN guidelines for the prevention of biodiversity loss caused by alien invasive species](#), 2022 as **Annex BF 65**

3. Kortz/Magurran, [Increases in local richness \(\$\alpha\$ -diversity\) following invasion are offset by biotic homogenization in a biodiversity hotspot](#), Biology Letters 2019, 20190133 as **Appendix BF 66**

4. Bellard/Cassey/Blackburn, [Alien species as a driver of recent extinctions](#), Biology Letters 2016, 20150623 as **Annex BF 67**

5. Vitousek/D'Antonio/Loope et al, [Introduced Species: A significant component of human-caused global change](#), New Zealand Journal Ecology 1997, 1 as **Annex BF 68**

6. Pejchar/Mooney, [Invasive species, ecosystem services and human well-being](#), Trends in Ecology & Evolution 2009, 497 as **Annex BF 69**

4. Consequences of biodiversity loss for humans

After all, the loss of biodiversity is just as clear as in the case of climate change, which is the subject of more public debate, as is also stated in legal discourse (Rodriguez-Garavito/Boyd, Transnational Environmental Law 2023, 498 et seq.; Henn/ von Vittorelli/ Seppelt 2024, <https://osf.io/preprints/socarxiv/54vtr>). As already explained (in Part 1 A. I. 1.), by being a core element of functioning ecosystems, biodiversity provides a number of essential services for living beings, such as ensuring the resilience and stability of ecosystems, regulating the climate, pollination in food production, keeping air and water clean, enabling soil formation and protecting against natural disasters such as flooding and erosion.

Therefore, by undermining all of this, biodiversity loss has serious consequences for human life and therefore also for fundamental rights, as it has a negative impact on the stability and continuity of ecosystems and the provision of goods and services on which humanity depends, such as soil fertility, pollination, oxygen production and more. There has been a broad scientific consensus on this for some time

Beweis:

1. IPBES, [The Global Assessment of Biodiversity and Ecosystem Services](#), Summary for Policy Makers, 2019, p. 10 et seq. as **Annex BF 22**

2. Rodriguez-Garavito/ Boyd, [A Rights Turn in Biodiversity Litigation?](#), Transnational Environmental Law 2023, 498 et seq. as **Annex BF 70**

3. Landi/Minoarivelo/Brännström et al, [Complexity and stability of ecological networks](#), Population Ecology 2018, 319 as **Annex BF 12**

4. Pimm/Jenkins/Abell et al, [The biodiversity of species and their rates of extinction, distribution, and protection](#), Science 2014, 1246752 as **Annex BF 28**

5. Chaplin-Kramer/Sharp/Weil et al, [Global modeling of nature's contributions to people](#), Science 2019, 255 as **Annex BF 71**

6. Mace, [Whose conservation?](#), Science 2014, 1558 as **Annex BF 72**

7 Keith/Ferrer-Paris/Nicholson et al, [A function-based typology for earth's ecosystems](#), Nature 2022, 513 as **Annex BF 73**

Robert Watson, former IPBES chairman, put it in a nutshell: "As ecosystems deteriorate, we have to deal with them.

"undermine the foundations of our economy, our livelihoods, our food security, our health and our quality of life worldwide" (own translation).

B e w e i s : Robert Watson, [UN SDGs website](#), 2019

Consistent with the existing scientific findings, the SRU/WBBGR/WBW report also emphasizes the massive impact of biodiversity loss on humans in particular:

"The consequences are serious - for us humans too. Damaged ecosystems can only provide many of their services to a limited extent or not at all, for example food production, carbon storage or the regulation of the water balance. They are also less able to buffer disturbances, such as forest fires or the immigration of alien species. Extreme events caused by climate change, such as droughts or heavy rainfall, increase these risks. Renaturation measures are therefore urgently needed to promote the resilience and adaptability of ecosystems and to create synergies with climate change mitigation and adaptation. This applies inside and outside protected areas and even to non-natural ecosystems such as farmland or urban parks. As a rule, land use practices have to change for this to happen[...]"

"With its ecosystem services, nature (...) provides the basis for our lives and economic activity (...): It provides food and raw materials, regulates important material cycles and can positively influence our health in many ways (...). Degraded ecosystems can only fulfill many of these functions and services to a limited extent or not at all and are less able to buffer against disturbances such as droughts or floods. Multifunctional and resilient ecosystems are the basis for agricultural and forestry production as well as fisheries. They also contribute to natural climate protection and are essential for adapting to the consequences of climate change (...)"

B e w e i s : SRU/ WBBGR/ WBW, [Statement April/ August 2024](#), p. 9 and 12 as Annex BF 58

The statements made here and above (in Part 1 A. I. 1.) on the importance of biodiversity, from which the fatal effect of its disappearance on the vital foundations of human life and thus also of human freedom directly results, merely need to be supplemented somewhat here:

a Threat to food safety

Agriculture, fisheries and forestry supply society with food and animal feed, energy crops such as rapeseed or maize, industrial crops such as starch or fiber crops, residues and by-products such as liquid manure or straw, as well as wood. Arable farm-

ing makes by far the largest contribution to the domestic production of food and animal feed. Grassland contributes to animal nutrition and thus to the production of animal foodstuffs in the form of pasture or mown cuttings. In mathematical terms, Germany covers around 80 % of its own food requirements.

B e w e i s : SRU/ WBBGR/ WBW, [Statement April/ August 2024](#), p. 9, 12 and 28 as Annex BF 58

More than three quarters of the world's food crops, including fruit and vegetables, as well as a large number of important crops, depend on animal pollination and are therefore essential for food production.

B e w e i s : 1. IPBES, [The Global Assessment of Biodiversity and Ecosystem Services](#), Summary for Policy Makers, 2019, p. 13 as Annex BF 22

2 UNEP, [Global Environment Outlook - GEO-6: Summary for Policymakers](#), 2019, p. 17 as Annex BF 22 b

In addition to pollinator diversity, water availability, erosion control, soil structure and soil fertility also have a significant impact on agricultural yields. In Germany (<https://neobiota.bfn.de/index.html>), it is also assumed that around 10 % of invasive species cause nature conservation problems and/or economic damage, e.g. a reduction in harvests, increased use of pesticides in agriculture and forestry or increased costs for the maintenance of roads, waterways and railroads.

B e w e i s : SRU/ WBBGR/ WBW, [Statement April/ August 2024](#), p. 28 as Annex BF 58

The decline in soil biodiversity in particular, which is under massive pressure from intensive farming, contributes to many environmental problems, such as excessive nutrient pollution of freshwater bodies, reduced above-ground biodiversity and global warming. A decline in soil biodiversity leads to a decrease in the performance of essential ecological cycles.

B e w e i s : Dasgupta Report, [The Economics of Biodiversity](#), 2021, p. 18 as **Annex BF 74**

The basic prerequisite for food safety is therefore a stable agricultural yield, which can only be maintained if the above-mentioned parameters are preserved. In view of the ongoing loss of biodiversity, this is clearly not guaranteed. If indicators that measure the contribution of nature, such as pollinator diversity or organic carbon in the soil, decline, this has drastic consequences. For example, global land productivity has declined by around a quarter due to soil degradation, which not only affects food security (especially with a growing world population), but - similar to climate change - also makes violent internal or interstate conflicts more likely, further undermining the foundations of human freedom (Rodriguez-Garavito/ Boyd, Transnational Environmental Law 2023, 498 et seq.). In addition, changes to agriculture and forest management are also necessary in the face of climate change. The SRU/ WBBGR/

WBW report explains this:

"Climate change is altering external conditions such as temperatures and the amount, intensity and variability of precipitation. This harbors risks: In agriculture, they can lead to shifts in cultivation areas, pest infestations and diseases, heat stress in plants and livestock, wind and water erosion and ultimately to yield losses or quality losses (UBA 2023d; KAHLENBORN et al 2021, p. 56). Climate change also causes stress in forests due to heat, drought, pests and diseases. These calamities, as well as windthrow and a higher risk of forest fires, result not only in ecological impacts but also in losses in yields as well as regulatory and recreational functions (KAHLENBORN et al 2021, p. 60; FORZIERI et al 2021; WBW 2021). The necessary changes for agriculture and forest management can and should also be used to pursue renaturation goals."

B e w e i s : SRU/ WBBGR/ WBW, [Statement April/ August 2024](#), p. 27 as Annex BF 58

And the SRU/ WBBGR/ WBW report underlines once again that the conservation of biodiversity, including its renaturation or restoration, is a prerequisite for long-term food security in Germany:

"Restoration measures that provide for more landscape elements such as hed-
ges, species-rich field margins, copses, small bodies of water, wetlands and flower strips and areas in the landscape, as well as environmentally friendly farming methods that use fewer pesticides and nutrient inputs, can sometimes lead to reduced yields. However, they are essential to protect the soil from wind and water erosion, create habitats for pollinators and other beneficial insects and keep water in the landscape. Without these functions, it will not be possible to achieve stable agricultural yields in the long term (HABER 1990; KNOKE et al 2012; DREXLER et al 2021). Restoration measures therefore maintain the agricultural economic basis in the medium and long term and thus serve the food security of current and future generations. In addition, renaturation measures are urgently needed to adapt land use to climate change, as this also requires, among other things, an intact water cycle and a high level of agrobiodiversity."

B e w e i s : SRU/ WBBGR/ WBW, [Statement April/ August 2024](#), p. 33 as Annex BF 58

As already mentioned, all this only adds to the facts already explained (Part 1 A. I. 1.) that the loss of biodiversity affects not only food production, mediated by pollination, soil regeneration, etc., but also other ecosystem services such as water regulation, which are either very expensive or even irreplaceable and whose loss therefore massively endangers the livelihoods of mankind.

The threat to the food supply is also due to the fact that - particularly as a result of conventional agriculture and excessive animal husbandry - water bodies, and surface waters in particular, are largely not in good condition. The status of surface waters and groundwater must be monitored in accordance with Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy (hereinafter WFD) and improved within the framework of management plans and programs of measures.

This management planning is currently in its third and final management period. The Federal Environment Agency has summarized the results of this third management planning as follows:

"In 77 percent of surface waters and 29 percent of groundwater, impacts on water status can be traced back to agriculture. Our standard of living is largely based on industrial production, such as the chemical industry, machine and vehicle construction and energy generation. Despite advances in wastewater treatment and air pollution control, pollutants are still being discharged into water bodies. In 67 percent of all surface waters, effects on water quality can be observed that are primarily attributable to industry and mining. Municipal wastewater treatment plants make a significant contribution to reducing nutrient and pollutant inputs. Nevertheless, these inputs are still too high. Comprehensive flood protection is necessary to protect settlements so that water bodies are developed accordingly. In 35 percent of surface waters, impacts on water status can be attributed to pollution from municipalities and households. Other water body users include flood protection, hydropower and shipping, which can also lead to considerable pressures and impacts on water body status. Multiple pressures and multiple impacts are typical. Almost half of groundwater bodies are polluted. In over 80 percent of surface waters, two to six pressures occur simultaneously; only one percent is considered unpolluted. The main effects of these pressures are changes to the structure of water bodies, disruption of continuity and pollution due to excessive nutrient and pollutant inputs. The effects of climate change on water bodies are also becoming increasingly apparent. ... Currently, 9 percent of all surface waters achieve very good status or good ecological status or potential. This is about one percent more than in 2015. The number of poorly assessed water bodies has also decreased to the same extent. ... Today, none of the surface waters achieve good chemical status. This is primarily due to the fact that mercury spreads through the air via the combustion of fossil fuels and is deposited in soil and water over a wide area. Other pollutants are also the reason for this failure to meet the target. (...)"

Evidence: UBA, [The Water Framework Directive - Waters in Germany](#), 2021, p. 16 as **Annex BF 75**

Chapter 7 of the status report on the environmental status of North Sea waters contains similarly unfavorable findings:

"13 % of German North Sea waters achieved good status in the 2015-2020 assessment period, while 87 % continued to be affected by eutrophication. There was a clear gradient from the coast to the open North Sea, with significant exceedances of the threshold values in the coastal waters and the adjacent river plumes. Both the nutrient concentrations and the direct and indirect eutrophication effects showed a clear improvement compared to the last assessment. However, the concentrations of total nitrogen in the estuaries of the Elbe, Ems, Weser and Eider continue to significantly exceed the management objectives, while the guidance value for total phosphorus is only exceeded by the Elbe. Agriculture contributed over 70 % of nitrogen and 40 % of phosphorus inputs to German North Sea waters in 2016-2018. 60 % of phosphorus inputs came from wastewater management. [...] The pollution of German North Sea waters is still too high. The ubiquitous pollutants mercury in sediment and marine organisms and polybrominated diphenyl ethers (PBDEs) in marine organisms have led to the

WFD management and MSFD environmental objectives not being met across the board. The concentrations of lead (sediment), a representative of polychlorinated biphenyls (PCB-118) (biota), benzo(g,h,i)perylene (water), tributyltin (TBT) (sediment and water), perfluorooctane sulfonic acid (PFOS) (water) as well as cypermethrin and imidacloprid (both water) also exceeded their threshold values. Litter is omnipresent and pollutes beaches, seabed, water column and marine organisms. (...) The good environmental status for fish has not been achieved overall. (...) More than a third (38 %) of the 78 resting and breeding populations of seabirds and shorebirds in the German North Sea considered were in poor condition in 2015-2020 (...). Among marine mammals, grey seals and harbor seals were in good condition. Their positive trend continued in the reporting period. Minke whales and white-beaked dolphins could not be assessed. In contrast, the status of harbor porpoises remains poor according to the 2019 FFH assessment. This is due to adverse effects from underwater noise pollution, food reduction and bycatch as a result of commercial fishing as well as adverse effects on their habitats. Suitable retreat and resting areas should ensure better protection from anthropogenic disturbance."

B e w e i s : Federal-Länder Working Group on the North Sea and Baltic Sea, [Status Report 2024](#), Chapter 7 as **Annex BF 76**

b Decreasing function of biodiversity to protect physical and mental health

In addition to the above, further massive threats to biodiversity loss are listed below.

Biodiversity stabilizes and safeguards human health. It also does this as a basis for medicines: Biodiversity is a basis for the development of medicines; for example, a large proportion of cancer drugs are inspired by nature. In addition, four billion people are predominantly dependent on natural medicines. The overall link between biodiversity and human health has long been scientifically proven. In addition to protection against diseases, including pandemic prevention, it is also about influencing the human microbiome and reducing harmful environmental influences from human activities, for example. Other effects of nature and open spaces on physical and mental health also include: stress reduction, reduction of cardiovascular diseases, reduction of the risk of pregnancy and birth problems, less depression and less cognitive decline. The IPBES also recognizes this connection. Nature supports all dimensions of human health and contributes to the intangible aspects of quality of life such as inspiration and learning, physical and psychological experiences and support for identity formation, which are central to quality of life and cultural integrity.

B e w e i s : 1. IPBES, [The Global Assessment of Biodiversity and Ecosystem Services](#), Summary for Policy Makers, 2019, pp. 10 and 12 as Annex BF 22

2. Pongsiri/Roman/Ezenwa et al, [Biodiversity loss affects global disease ecology](#), Bioscience 2019, 945 as **Annex BF 77**

3. Keesing/Belden/Daszak et al, [Impacts of biodiversity on the emergence and transmission of infectious diseases](#), Nature 2010, 647 as **Annex BF 78**

4. Chivian/Bernstein, [Sustaining life: how human health depends on biodiversity](#), 2013 as **Annex BF 79**

Mirroring this, the destruction of biodiversity poses a serious risk to human health, as new infectious diseases can emerge as a result. Due to human activities affecting ecosystems and biodiversity, there is a growing risk of diseases spreading from wild and domestic animals to humans.

B e w e i s :

1. Boyd, [Human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment](#), 2020 as Annex BF 63

2. UNEP/ ILRI, [Preventing the next pandemic](#) . Zoonotic diseases and how to break the chain of transmission, 2020 as **Annex BF 80**

With the pandemic, all this has gained attention. Even before the COVID-19 pandemic in 2020, the benefits of nature for human health (physical and mental) were highlighted; biodiversity was recognized by the WHO as an essential environmental factor for human health. The emergence of COVID-19 highlights the potential risks of novel infectious diseases arising from human-wildlife interactions (see also Recital 22 of the Recovery Regulation). Zoonoses account for around three quarters of emerging infectious diseases. There is increasing evidence of local transmission of mosquito-borne diseases such as malaria, dengue, West Nile fever and chikungunya in European countries. Tick-borne diseases such as Lyme disease are also spreading in Europe.

B e w e i s :

1. WHO/ CBD/ UNEP, [Connecting global priorities: biodiversity and human health: a state of knowledge review](#), 2015 as **Annex BF 81**

2 WHO, [Nature, Biodiversity and Health](#), 2021 as **Annex BF 82**

3 SRU, [Consistently thinking together environment and health](#), special report, 2023 as **Annex BF 83**

It is estimated that more than 60% of human infectious diseases are zoonoses , i.e. diseases that pass from an animal species to humans, not just COVID-19, but also HIV, Ebola and the Zika virus.

B e w e i s :

1. Boyd, [Human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment](#), 2020 as Annex BF 63

2. Knox, [Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment](#), 2017 as **Annex BF 84**

3 Secretariat of the CBD, [Global Biodiversity Outlook 5](#), 2020 as Annex BF 30

As the effects of species and habitat extinction, including the consequences for food security, peaceful coexistence and more, continue to worsen as we have seen, the high loss of biodiversity will have further profound consequences for humanity. Low resilience of ecosystems can lead to a sudden decline in biological productivity, which in turn can lead to a loss of ecosystem functions for current and future generations, some of which are irreversible and some of which are difficult to reverse.

B e w e i s :

1. Dirzo/Young/Galetti et al, [Defaunation in the Anthropocene](#), Science 2014, 401 as **Annex BF 85**

2. Petchey/Gaston, [Extinction and the loss of functional diversity](#), Proceedings of the Royal Society London Biology 2002, 1721 as **Annex BF 86**

c Loss of ecosystem services and serious economic consequences

The fact that biodiversity is essential for food production, healthcare, climate change mitigation and energy requirements also constitutes a very significant economic value of ecosystem services (e.g. the economic effect of pollination by insects). Half of global GDP thus depends on ecosystem services that continue to function.

B e w e i s :

1. Lippert/Feuerbacher/Narjes, [Revisiting the economic valuation of agricultural losses due to large-scale changes in pollinator populations](#), Ecological Economics 2021, 06860 as **Annex BF 87**

2. World Economic Forum, [The Future of Nature and Business](#), 2020, p. 7 as **Annex BF 88**

The considerable economic costs of a further loss of biodiversity, which arise in particular from a loss of the ecosystem services already described, are therefore also of enormous importance, as the SRU/WBBGR/WBW report in particular points out:

"18 Certain ecosystem services bring high economic benefits (e.g. Natural Capital Germany - TEEB DE 2016; DASGUPTA 2021; BARBIER 2022). Habitats that are heavily interfered with by humans in order to maximize a specific service generally provide fewer of the other ecosystem services (HOLT et al 2016). In

particular, the focus on agricultural and forestry production often reduces regulating ecosystem services (e.g. regulation of regional water cycles: LATINOP-OULOS et al 2020; in general, see BOHAN and VANBERGEN 2021; SRU 2015, para. 194 et seq.). This can lead to enormous consequential costs for the general public (e.g. expenses for water treatment, flood damage etc.). However, these costs are usually not directly visible at the individual company level. A fundamental problem is therefore that business decisions on how ecosystems are used do not take all economic consequences into account (BARBIER 2022) - to date, the law has provided too few incentives for this in central land use areas such as agricultural soil cultivation and forestry (see section 4.5). [...]

23 Renaturation promotes functioning ecosystems with intact cycles (e.g. material, water and carbon cycles). This ensures the so-called regulating ecosystem services and thus generates a variety of benefits (Table 2: indirect use values). For example, intact water cycles across different ecosystems (e.g. watercourses, forests, floodplains) protect against flooding and erosion, purify wastewater and enable groundwater recharge. In contrast, degraded ecosystems disrupt the functioning of water cycles and provide fewer of the corresponding services (GRIZETTI et al 2019). In particular, agricultural yields also depend on various regulating ecosystem services (para. 73). For example, pollination ensures the fruit production of many crops and thus makes agricultural yields possible in the first place (HANLEY et al 2015). A hypothetical collapse of pollinator populations in Germany could cause short-term economic damage in the order of around EUR 3.8 billion (mean value of estimates in LIPPERT et al 2021, p. 12). Pollinator-friendly management can also be financially worthwhile at individual farm level (HIPÓLITO et al 2016).

24 The more climate change progresses, the more important those regulating ecosystem services become that serve climate protection (e.g. CO₂ storage, see RIEGEL et al 2023) or enable climate adaptation (IBISCH 2023, p. 122). Ecosystems that are resilient and adaptable to climate extremes bring great economic benefits. The example of resilient forest management to adapt to dryness and drought illustrates this (UBA 2023d): The costs for the conversion of particularly endangered beech and spruce forests in Germany at risk locations with drought-tolerant tree species will probably amount to 14 to 43 billion euros over the next thirty years, i.e. an average of around 1 billion euros per year (BOLTE et al 2021). This includes expenditure on artificial regeneration including soil preparation, planting, browsing protection, cultivation care, etc. These expenses are offset by benefits from avoided or reduced future drought damage (additional co-benefits, e.g. for human health, see SRU 2023b). The damage caused to forest management in Germany by the most recent summers of heat and drought provides a point of reference here. For example, MÖHRING et al (2021) estimate the economic damage caused by drought for forestry operations between 2018 and 2020 at 12.7 billion euros (see also TRENCZEK et al 2022). Quantitative results always depend on specific modeling assumptions. Therefore, the costs and benefits determined in different studies cannot be directly offset against each other. However, the decisive factor here is not exact values, but the general realization that the costs of forest conversion are offset by the benefits of climate change adaptation - the more long-term the perspective taken, the greater the benefits (HANEWINKEL et al 2013). Against this background, expenditure on the active conversion of forests at risk of drought stress appears to make sense as a precautionary investment in resilience to future climate extremes. In many

cases (e.g. small private forests), financial support is required to enable the necessary investments - especially if this provides additional ecosystem services as public goods (KNOKE and MOOG 2005; see para. 173 et seq.)."

Beweis: SRU/ WBBGR/ WBW, [Statement April/ August 2024](#), p. 17 et seq. as Annex BF 58

The Federal Government's Commission on the Future of Agriculture has estimated the damage caused by agriculture through pollutant emissions, water pollution and soil degradation as well as to biodiversity and ecosystem services in Germany at 90 billion euros per year (ZKL, Zukunft Landwirtschaft. A task for society as a whole, 2021, p. 140). These costs will increase in particular if the rapid loss of biodiversity is not halted and measures to restore biodiversity are not started as soon as possible. Accordingly, subsequent conservation measures will not only become increasingly difficult, but also increasingly expensive if the negative effects of biodiversity loss are not halted and reversed immediately.

d Loss of the protective function of coastal habitats and other massive threats

With the loss of coastal habitats and coral reefs, the protection of coastal regions is also declining. The risk of floods and hurricanes causing massive consequences, such as endangering the lives and property of people living in coastal floodplains, is increasing.

Beweis: IPBES, [The Global Assessment of Biodiversity and Ecosystem Services](#), Summary for Policy Makers, 2019, p. 14 as Annex BF 22

This development is particularly threatening as sea levels are rising due to climate change. Biodiversity is therefore also essential for mitigating the effects of climate change. Furthermore, biodiversity serves as a model for technical innovations, even beyond the development of medicines. Biodiversity is also of crucial importance for human recreation and for other intangible contributions of nature to human quality of life, even beyond the direct links to health outlined above

Beweis: 1. TEEB, [The economics of ecosystems and biodiversity](#), Synthesis Report 2012 (German version), p. 25 et seq. as Annex BF 21

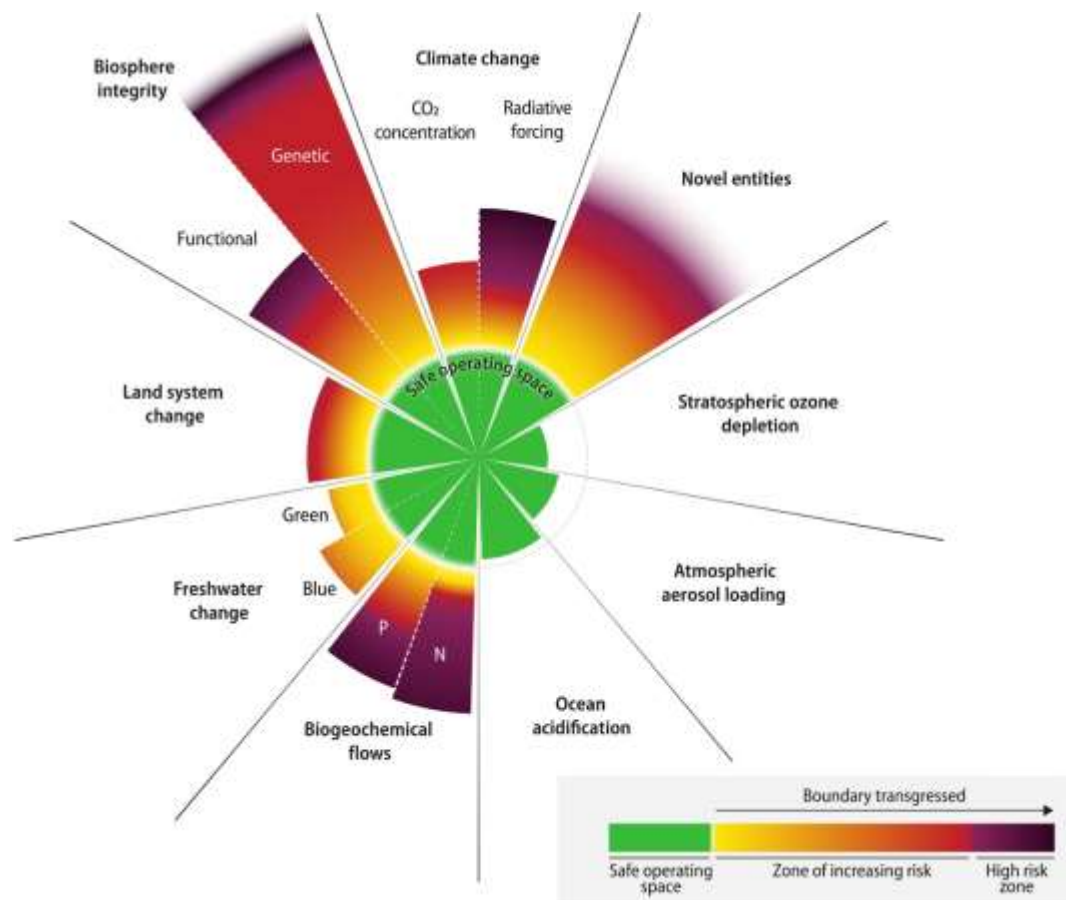
2 Diaz/Pascual/Stenseke et al, [Assessing nature's contributions to people](#), Science 2018, 270 as **Annex BF 89**

With the continuous decline in biodiversity, these functions for human existence are being undermined.

5. Biodiversity loss and planetary boundaries - Rapid action even more necessary than on climate change

The situation regarding biodiversity for people's basic freedoms and thus the urgency of rapid legislative action is even more dramatic than in the case of climate change, the consequences of which have been classified as relevant to human rights (BVerfGE 157, 30 et seq.; ECtHR, judgment of 09.04.2024, No. 53600/20).

Nationally and globally, the loss of biodiversity with the collapse of ecosystems is one of the greatest threats to humanity. The *threat is more advanced than climate change*, as will be explained below, even if it receives significantly less attention, for example in the legal discourse (Henn et al, NuR 2024, 234 et seq.; Ekardt/ Günther/ Hagemann/ Garske/ Heyl/ Weyland, Environmental Sciences Europe 2023, 80). This alone calls for even faster action than on climate protection. This and the fact that biodiversity and biosphere integrity represent the most threatened ecological area can be illustrated using the methodology of the so-called planetary boundaries, which has been intensively received worldwide over the last 15 years, initially shown here graphically in its current version (the assessment of the state of the boundaries is carried out on the basis of a categorization in several stages and distribution of associated color codes; the red area already marks the high-risk zone):



B e w e i s :

1. Rockström et al, Safe and just Earth system boundaries, Nature 2023, 102 et seq. as Annex BF 20 (image source)
2. Lähteenmäki-Uutela/ Ituarte-Lima/ Turunen/ Ott/ Lonkila/ Haukioja, [Planetary Boundaries Nurturing the Grand Narrative of the Right to a Healthy Environment?](#), Environmental Policy and Law 2024, 15 et seq. as **Annex BF 90**
3. Rockström et al, [A safe operating space for humanity](#), Nature 2009, 472 et seq. as **Annex BF 91**
4. Rockström/ Kotzé/ Milutinović/ Biermann et al, [The planetary commons: A new paradigm for safeguarding Earth-regulating systems in the Anthropocene](#), Proceedings of the National Academy of Sciences 2024, 121 (5) e23015311 as **Annex BF 92**

The Senate has already implicitly recognized the concept of planetary boundaries (cf. BVerfGE 157, 30, para. 198). Methodologically, the state of biodiversity is considered in the concept of planetary boundaries under the heading of biosphere integrity, whereby the genetic and functional integrity of the biosphere are named. These two highly overlapping metrics do not cover all detailed aspects of biodiversity, but can cover the entire earth's surface and represent the various functions of biodiversity. Genetic diversity encompasses the diversity of the entire gene pool. The more genetically diverse species and individuals there are, the greater the chance for living organisms and ecosystems to adapt to abrupt or gradual abiotic changes. Functional diversity encompasses the variety and scope of the functional characteristics of organisms in an ecosystem and thus describes the functionality of the biosphere.

B e w e i s :

as before

Intact natural ecosystems, which would slow down the extinction of species, are in this sense those that are not or only slightly intensively used by humans and thus do not significantly impair the species composition, ecological functions and functional integrity. The disappearance of intact natural areas leads to an increase in biodiversity extinction rates. For humanity, this means, among other things, the loss of pollination and pest control, which threatens food security and human health. **The maximum extinction rate that can preserve the ecological diversity and biosphere essential to humanity is less than 10 E/MSY (extinctions per million species-years). However, the current extinction rate is conservatively calculated - as explained - at over 100, possibly even 1000 E/MSY, i.e. in an extremely dangerous range, and is continuing to rise.**

B e w e i s :

1. Rockström et al, Safe and just Earth system boundaries, Nature 2023, 102 et seq. as Annex BF 20
2. Rockström et al, [A safe operating space for humanity](#), Nature 2009, 472 et seq. as Annex BF 91

3. Rockström/ Kotzé/ Milutinović/ Biermann et al, [The planetary commons: A new paradigm for safeguarding Earth-regulating systems in the Anthropocene](#), Proceedings of the National Academy of Sciences 2024, 121 (5) e23015311 as Annex BF 92

The species-area-relationship (SAR) is used to predict how this will continue in the future, i.e. how many species are likely to become extinct due to the destruction of undisturbed natural habitats. Critical threshold values (extinction threshold) can be determined on this basis. When these thresholds are reached, even small additional changes to the habitats can lead to rapid extinction and irreversible regime shifts. The values vary depending on the species and habitat type. However, if only 10-30 % of natural habitats remain in a landscape, most communities will collapse. For this reason, Rockström et al set the threshold values at 30 %, taking into account that SAR tends to underestimate species extinction and that diversity erosion is a critical and permanent loss.

Beweis :

1. Rockström et al, Safe and just Earth system boundaries, Nature 2023, 102 et seq. as Annex BF 20
2. Rockström et al, [A safe operating space for humanity](#), Nature 2009, 472 et seq. as Annex BF 91
3. Rockström/ Kotzé/ Milutinović/ Biermann et al, [The planetary commons: A new paradigm for safeguarding Earth-regulating systems in the Anthropocene](#), Proceedings of the National Academy of Sciences 2024, 121 (5) e23015311 as Annex BF

According to Rockström et al, a safe planetary boundary requires the preservation of natural, intact ecosystems on 50-60% of the global land surface. This area also corresponds to Target 2 of the Kunming-Montreal Global Biodiversity Framework (GBF) adopted in 2022.

Beweis :

1. Rockström et al, Safe and just Earth system boundaries, Nature 2023, 102 et seq. as Annex BF 20
2. Rockström et al, [A safe operating space for humanity](#), Nature 2009, 472 et seq. as Annex BF 91
3. Rockström/ Kotzé/ Milutinović/ Biermann et al, [The planetary commons: A new paradigm for safeguarding Earth-regulating systems in the Anthropocene](#), Proceedings of the National Academy of Sciences 2024, 121 (5) e23015311 as Annex BF 92

In other words, functional integrity refers to the ability of urban, agricultural or other human-altered ecosystems to provide ecological functions and contributions to humans at the landscape scale, complementing the Earth system's contributions to nature provided by large-scale intact natural ecosystem areas (mentioned in Part 1 A. I. 1.). **There are six particularly critical local contributions to nature that are of fundamental importance**

to humanity and that are also addressed in the course of the planetary boundaries: **Pollination, pest and disease control, water quality regulation, soil conservation, natural hazard mitigation, and recreation.** If the threshold values listed in the last paragraphs are undercut, food production and security can no longer be guaranteed. In this respect, however, the safe limits of the area of largely intact natural ecosystems and functional integrity are currently clearly exceeded. **This means that the livelihoods of current and future generations are at risk. In contrast to the climate, the safe limits of functional integrity and the area of almost intact ecosystems have already been exceeded, which means that there is an even greater urgency to act.** The global proportion of areas of largely intact natural ecosystems is currently only around 45-50 %, in Europe less than 20 %, and even lower in densely populated countries such as Germany (see Part 1 A. II. 2.: even in FFH areas and thus in protected areas, less than a third of the site types and species are in a favorable conservation status). This is far below the values mentioned.

B e w e i s :

1. Rockström et al, Safe and just Earth system boundaries, Nature 2023, 102 et seq. as Annex BF 20
2. Rockström et al, [A safe operating space for humanity](#), Nature 2009, 472 et seq. as Annex BF 91
3. Rockström/ Kotzé/ Milutinović/ Biermann et al, [The planetary commons: A new paradigm for safeguarding Earth-regulating systems in the Anthropocene](#), Proceedings of the National Academy of Sciences 2024, 121 (5) e23015311 as Annex BF 92
4. IPBES, [The Global Assessment of Biodiversity and Ecosystem Services](#), Summary for Policy Makers, 2019, p. 25 and passim as Annex BF 22

The functional boundary has also been understood as the boundary for human appropriation of the NPP (net primary production = predictable substitute for photosynthetic energy and material flow into the biosphere) of the biosphere (HANPP) as a fraction of the Holocene NPP. The NPP is of fundamental importance for ecosystems as it supports their maintenance, reproduction, differentiation, connectivity and growth. In this respect, the planetary boundary is understood as a human appropriation of 10 % of the Holocene mean NPP, which transitions to the high-risk zone at 20 %. At present, however, it is already at 30 %. From this perspective, too, the planetary boundary is therefore far exceeded.

B e w e i s :

- Richardson et al, [Earth beyond six of nine planetary boundaries](#), Science Advances 9/ 2023, 3 as **Annex BF 93**

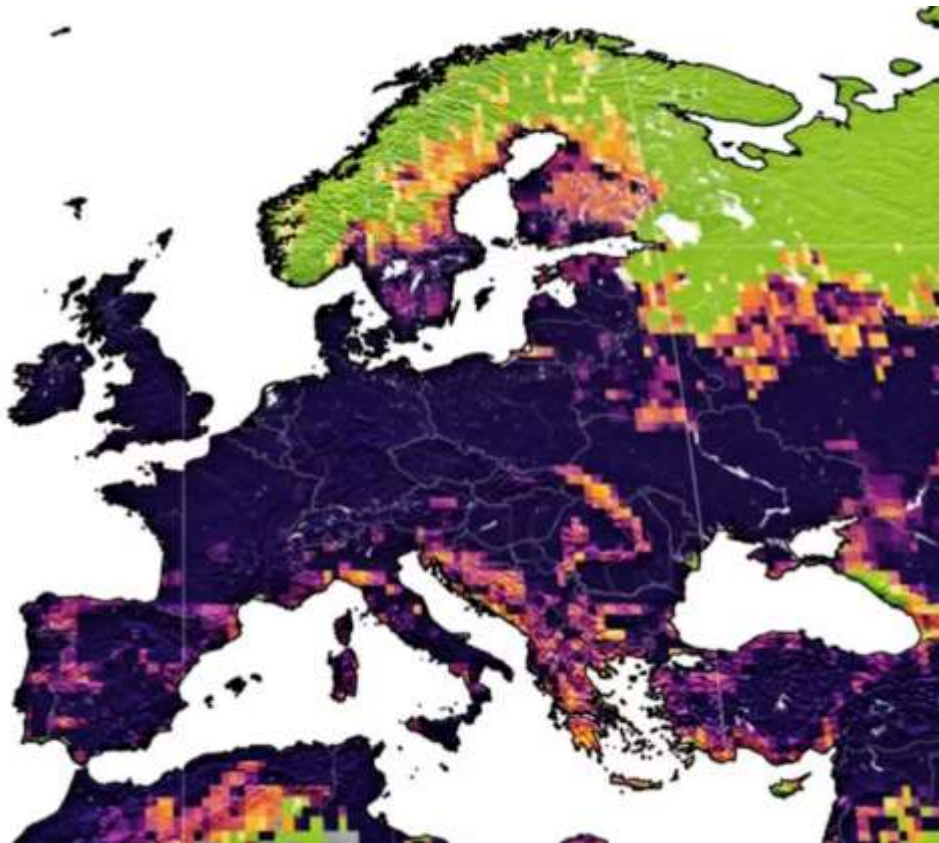
In principle, biodiversity could also renew itself again in the long term through evolutionary processes, although the extinction of species is not reversible. **However, ecosystems can collapse and thus be irreversibly damaged or destroyed, especially when tipping points are currently exceeded (described in detail in Zerbe/Wiegleb, Renaturierung von Ökosystemen in Mitteleuropa, 2016). Fertile soils, for example, cannot actually be restored in human timescales, nor can raised bogs, and it takes around 100 years**

for forests.

Beweis:

1. Oliver, [How much biodiversity loss is too much?](#), Science 2016, 220 as **Annex BF 94**
2. Brook/Ellis/Perring et al, [Does the terrestrial biosphere have planetary tipping points?](#), Trends in Ecology & Evolution 2013, 396 as **Annex BF 95**
3. Barnosky/Hadly/Bascompte et al, [Approaching a state shift in Earth's biosphere](#), Nature 2014, 52 as Annex BF 29
4. Rockström et al, Safe and just Earth system boundaries, Nature 2023, 102 et seq. as Annex BF 20
5. Rockström et al, [A safe operating space for humanity](#), Nature 2009, 472 et seq. as Annex BF 91
6. Lähteenmäki-Uutela/ Ituarte-Lima/ Turunen/ Ott/ Lonkila/ Haukioja, [Planetary Boundaries Nurturing the Grand Narrative of the Right to a Healthy Environment?](#), Environmental Policy and Law 2024, 15 et seq. as Annex BF 90

The situation in Europe, including Germany, is particularly dramatic, as shown in a graph published in September 2024 by Johan Rockström's research team at the Potsdam Institute for Climate Impact Research (PIK). The purple colouring symbolizes - based on the graph on planetary boundaries presented at the beginning of this section - the high-risk area, i.e. the highest risk category of the doctrine of planetary boundaries, in this case in relation to biosphere integrity and thus biodiversity loss:



B e w e i s : Caesar/ Rockström et al, [Planetary Health Check. A Scientific Assessment of the State of the Planet](#), 2024 as Annex BF 95 b

The explanations so far show: **Action is urgently and immediately required - and there is a threat of irreversible or, in view of the advanced impairment as well as the complex ecosystem interrelationships and extremely long periods of time required for intact ecosystems to emerge, hardly reversible damage to human livelihoods.** This is fatal if at the same time, as mentioned above (see Part 1 A. I. 1.), those ecosystem services are often difficult or even impossible to replace.

B e w e i s : IPBES, [The Global Assessment of Biodiversity and Ecosystem Services](#), Summary for Policy Makers, 2019, p. 10 and passim as Annex BF 22

This, and especially the exceeding of planetary boundaries, makes it clear that simply stopping the loss of biodiversity is not enough, but that the restoration of nature as part of a comprehensive conservation concept is absolutely essential. It is therefore not just a matter of expanding and optimizing individual protected areas; rather, it is a matter of tackling the damaging factors described, particularly on the part of intensive agriculture, which can only be achieved by means of a comprehensive conservation concept aimed at preserving - and thus also restoring - biodiversity. The SRU/ WBBGR/ WBW report summarizes this as follows:

"The state is obliged to effectively protect the natural foundations of life. This

includes an effective renaturation policy that safeguards the ecological foundation of supply, health and well-being. Successful renaturation can be economically beneficial in the short to medium term and also have positive economic effects over time. It secures valuable ecosystem services and thus contributes, for example, to flood protection or the adaptation of agricultural and forestry production to climate change. However, renaturation also brings challenges: it can restrict previous uses, influence the landscape or require high start-up investments for changed production methods. Strategies for dealing with divergent interests and conflicts are therefore crucial. Renaturation can only be successful if communication, participation and balancing interests are considered from the outset. Precisely because both the social negotiation processes and the implementation of measures require a great deal of time, a systematic renaturation policy must be initiated as quickly as possible. In addition to government action, this also requires the commitment of many social actors, especially private land users. This requires intensive and target group-specific communication about the benefits of renaturation and, last but not least, financial incentives."

A s s e s s : SRU/ WBBGR/ WBW, [Statement April/ August 2024](#) as
Annex BF 58, p. 9

Restoration must include nature conservation measures based on a coherent concept that takes into account the latest international biodiversity research. However, this alone is not enough; the damaging factors described in detail above must also be tackled on the ground, in particular climate change, over-fertilization, excessive pesticide exposure and other agricultural factors such as the large amount of agricultural land taken up by high animal food production.

B e w e i s : Langhammer/ Bull/ Bicknall et al, [The positive impact of conservation action](#), Science 2024, 453 et seq. as **An-
nex BF 96**

II. Obligations under international law: UN Convention on Biological Diversity

In the wake of the - reliable - scientific findings described above, a requirement has gradually been established under international law to preserve biodiversity, i.e. to halt the loss of biodiversity and to comprehensively protect and restore biodiversity, as will be explained below. This is relevant in the further course as a starting point, among other things, in the sense of an interpretation of fundamental rights that is friendly to international law (i.e. the right to liberty, the right to life and health and the state objective of environmental protection, as will be explained in more detail in Part 2). Just as the scientific starting point for biodiversity loss is similar to that for climate change, there is also a clear and binding target in international law with the aforementioned CBD - similar to international climate law with Art. 2 para. 1 of the Paris Agreement. This contains an obligation - to be set out below - to preserve biodiversity, i.e. to stop the loss of biodiversity immediately and to restore the loss of biodiversity that has already occurred, insofar as restoration is necessary to protect freedom, life, health and the preservation of the natural basis of life for future generations. Based on the historical development, the following explanations are necessary from our point of view:

To date, there are hundreds of instruments and treaties, each dealing with specific and narrow biodiversity issues - for example, the 1971 Ramsar Convention on the protection of wetlands or the 1979 Bonn Convention on migratory species (Koester, *The five global biodiversity-related conventions: a stocktaking*, Review of European Community & International Environmental Law 2002, 96) . These international agreements follow a sectoral approach and are supplemented by a large number of regional framework laws with similarly limited regulatory scope (Sands/Peel, *Principles of international environmental law*, 4th ed. 2018; Mrema, *Towards the new post-2020 global biodiversity framework*, Environmental Policy and Law 2021, 25).

In the 1970s and 1980s, it became apparent that the sectoral approach was not suitable for a regulatory subject matter that was of global significance, highly interdependent and threatened by transboundary environmental damage (Sands/Peel, *Principles of international environmental law*, 4th ed. 2018; UNEP, United Nation Environment Programme Governing Council Decision 14/26, 1987; Auer/Erdmann, in: Erdmann [ed.], *Internationaler Naturschutz*, 1997, p. 97) . Consequently, both an overarching convention with a much broader mandate and the participation of the vast majority of states were needed to combat the rapid degradation of ecosystems around the globe. These considerations, among others, ultimately led to the adoption of the CBD at the Rio Summit in 1992. The treaty entered into force in 1993 and currently has 196 parties (CBD Secretariat, List of Parties to the Convention on Biological Diversity, <https://www.cbd.int/information/parties.shtml>). This means that it has achieved almost universal participation (McConnell, *The biodiversity convention: a negotiating history*, 1996; Henne/Fakir, *The regime building of the convention on biological diversity on the road to nairobi*. Max Planck Yearbook of United Nations Law Online 1999, 315; LePrestre, *The CBD at ten: The long road to effectiveness*, Journal of International Wildlife Law & Policy 2002, 269) .

The CBD is the first framework convention that aims to conserve biodiversity in its entirety without focusing on specific ecosystems or species. In this respect, it is similar to its sister treaty, the United Nations Framework Convention on Climate Change (UNFCCC), which was also adopted at the Rio Summit (Ekardt/ Wieding/ Zorn, *Paris agreement, precautionary principle and human rights: zero emissions in two decades?* Sustainability 2018, 2812) .

Framework conventions are used in a two-stage process: First, the Parties agree on certain overarching objectives and principles (Glowka/Burhenne-Guilmin/Synge, *A guide to the convention on biological diversity*, Gland, International Union for Conservation of Nature, 1994; Ward, *Man or beast: the convention on biological diversity and the emerging law of sustainable development*, Vanderbilt Journal of Transnational Law 1995, 823; Cha, *Can the convention on biological diversity save the siberian tiger?* Environs: Environmental Law and Policy Journal 2001, 1). The parties then work on the adoption of protocols to create further substantive and procedural rules that formulate the tasks and obligations of the parties more concretely (Sand, *International environmental law after rio*, European Journal of International Law 1993, 377; Lim, *Biodiversity 2050: can the convention on biological diversity deliver a world living in harmony with nature?* Yearbook of International Environmental Law 2021) . To date, the Parties to the CBD have adopted two protocols under Article 28 of the CBD - the Cartagena Protocol on Biosafety in 2000 and the Nagoya Protocol on Access to Genetic Resources and Benefit-sharing in 2010 - which regulate specific

issues and create corresponding regulatory systems (Klein, New leadership needed: the convention on biological diversity, Emory International Law Review 2016, 32) .

The three main objectives according to Art. 1 CBD are the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources . The noun "conservation" means "protection of the natural environment", while the verb "conserve" means "to protect something and prevent it from being altered or destroyed" (Oxford Learner's Dictionary of Academic English, conservation (noun), 2023) . According to Art. 2 CBD, biological diversity means "the variability among living organisms from all sources, including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part: this includes diversity within species, between species and of ecosystems". **Biodiversity conservation therefore requires states to protect the variability of living organisms from adverse change - namely a net reduction in biodiversity - whereby "conservation", when biodiversity is already severely degraded as seen (Part 1 A. I.), requires not only halting its loss but also restoring it.**

Although the objectives of the CBD are formulated quite comprehensively (Harrop/Pritchard, A hard instrument goes soft: the implications of the convention on biological diversity's current trajectory, Global Environmental Change 2011, 474; Raustiala, Domestic institutions and international regulatory cooperation: comparative responses to the convention on biological diversity, World Politics 1997, 482; McGraw, The CBD - Key characteristics and implications for implementation, Review of European Community & International Environmental Law 2002, 17) , they must not be misunderstood as mere declarations of intent. Firstly, according to Art. 2 lit. a. VCLT, it depends on the intention of the parties whether the form of a treaty as a whole is to be legally binding. Secondly, the assessment of whether a norm imposes a legally binding obligation depends, inter alia, on its regulatory content and its specificity, which in turn can be determined by the rules of interpretation of Art. 31 and 32 VCLT (Oberthür/Bodle, Legal form and nature of the Paris outcome, Climate Law 2016, 40) . **Consequently, in the case of the CBD, it is undisputed that the Convention is a treaty under Art. 2 lit. a. VCLT and is therefore legally binding. This also applies to the objective of Art. 1 CBD to conserve biodiversity.** The general binding nature of treaty objectives in particular is also suggested in Art. 18 VCLT.

Art. 1 CBD therefore obliges states to conserve biodiversity and therefore to halt and reverse its loss without delay - legally binding since the CBD came into force in 1993 (Glinski, EJCL 2023, 416 et seq.; Ekardt/ Günther/ Hagemann/ Garske/ Heyl/ Weyland, Environmental Sciences Europe 2023, 80). Nevertheless, as shown above (in Part 1 A.), biodiversity and the extent of ecosystems with little anthropogenic influence have been declining continuously for many decades. The fact that the CBD came into force in 1993 has not yet had any measurable effect. It can therefore be assumed that states are actively neglecting their obligation under Art. 1 CBD to conserve biodiversity.

This obligation cannot be negated by referring to the fact that Art. 1 CBD states that the objectives of the Convention "shall be pursued in accordance with its relevant provisions". While it is true that Art. 1 CBD distinguishes between the objectives and the means of the Convention, the choice of instruments cannot undermine the normative requirement to prevent a net loss of biodiversity, as required by Art. 1 CBD. Otherwise, Parties could easily

violate the achievement of the objective while claiming to take measures that are permitted under the Convention, which would violate the obligation of good faith under Art. 26 VCLT.

The fact that the GBF (see Henn et al, NuR 2024, 234 et seq.; Ekardt/ Günther/ Hagemann/ Garske/ Heyl/ Weyland, Environmental Sciences Europe 2023, 80) supposedly wants to give the states some more time and present a rather long-term timetable for the conservation of biodiversity does not change the original obligation under Art. 1 CBD, which has called for immediate action since the Convention entered into force in 1993. Section F of the GBF states:

"The GBF's mission for the period up to 2030, towards Vision 2050, is to take urgent action to halt and reverse biodiversity loss so that nature can recover for the benefit of people and the planet by conserving and sustainably using biodiversity."

However, this timetable would be incompatible with Art. 1 CBD, which calls for a halt to the loss of biodiversity not in 2030, but since 1993 - or rather, the GBF can only be read in such a way that it now attempts to establish the legally compliant conditions that have long been required, at least in the medium and long term. However, the Kunming-Montreal GBF as a follow-up agreement pursuant to Art. 31 para. 3 lit. a VCLT cannot collide with the higher-ranking agreement - the CBD - as it can only specify the obligations of the Convention, but not modify them (Dörr/Schmalenbach, in: Dörr/Schmalenbach [eds.], Vienna Convention on the Law of Treaties, 2012, p. 521) . **Moreover, the GBF is not legally binding. In this respect, it is similar to UN Sustainable Development Goals (SDGs) No. 14 and 15, which also mention biodiversity conservation. It can therefore be stated that the Kunming-Montreal GBF contains legal clarifications of the CBD in accordance with Art. 31 para. 3 lit. 3 lit. a VCLT, but not only has a lower status than the CBD, but is also - indisputably - not legally binding and thus cannot weaken the content of Art. 1 CBD** (Ekardt/ Günther/ Hagemann/ Garske/ Heyl/ Weyland, Environmental Sciences Europe 2023, 80). And so far, there are no signs that Germany is actually planning to implement the GBF in practice; at any rate, there are no known draft laws or similar to date.

Overall, it can be stated that the goal of preserving biodiversity under international law is legally binding and is also comparable to the temperature limit for climate protection agreed in Art. 2 para. 1 of the Paris Agreement (Henn et al, NuR 2024, 234 (237); Ekardt/ Günther/ Hagemann/ Garske/ Heyl/ Weyland, Environmental Sciences Europe 2023, 80).

III. Summary

Overall, it can therefore be stated that biodiversity has continued to be lost globally and nationally, although the opposite is required under international law, namely its conservation, and has been since at least 1993, i.e. for over 30 years. **In this sense , the complainants are of the opinion that the conservation of biodiversity (i.e. a halt to the loss of biodiversity and its restoration, insofar as this is necessary to protect freedom, life and health and to preserve the natural basis of life for future generations) makes it imperative that a comprehensive legal protection concept exists or is created that provides for far-reaching measures.**

As a final summary of the - massively worrying - empirical findings presented so far, the **SRU** can once again be cited **as the official body appointed by the German government:**

"Only resilient, adaptable and interconnected ecosystems can provide the diverse services that we humans depend on today and in the future. For example, they can mitigate the effects of climate change that are already being felt, reduce nutrient and pollutant inputs into soils and waters and secure the production performance of agriculture and forestry. The condition of many ecosystems in Germany, Europe and worldwide has deteriorated to such an extent that large-scale renaturation is urgently needed to preserve them as the foundation of health and well-being. This is also reflected in the international commitments to protect biodiversity."

B e w e i s : SRU/ WBBGR/ WBW, [Statement April/ August 2024](#) as
Annex BF 58

As will be explained in more detail in Part 1 B. below, the measures envisaged to date, both individually and in combination, are not suitable for halting the loss of biodiversity and ensuring the necessary restoration.

B. Insufficient ambition level of existing strategies, nature conservation and other provisions

In the following, we present the national strategies adopted by the Federal Government for the protection of biodiversity as well as the legal approach to biodiversity loss. **In doing so, we will further deepen the already generally scientifically presented realization that the threat posed by the loss of biodiversity has been known for decades and that the executive (!) objectives in response to this have almost without exception not been achieved - and that the legislative special law cannot bring about a stop to the loss of biodiversity even in the estimation of the Federal Government, indeed: it does not even strive for it at the legal level and does not present a comprehensive protection concept for biodiversity by law (!).**
In detail:

I. National strategies for the protection of biodiversity

Following the entry into force of the CBD in 1993, the Federal Government presented a report on the implementation of the Convention on Biological Diversity for the first time in 1995 (Bundestag printed paper 13/2707), in which the political guiding principles and conceptual approaches to the conservation of biological diversity, the national legal bases, the national and supranational measures, international cooperation and the intended further development in all these areas were presented.

B e w e i s : BT printed matter as **Annex BF 97**

In 2002, the German government adopted the German Sustainable Development Strategy, which mentions the protection of biodiversity in several places, but does not contain any qualitative or quantified targets or specify concrete measures. On January 11, 2017, the Federal Cabinet adopted the "German Sustainability Strategy - New Edition 2016" (DNS), which was last updated in 2021.

B e w e i s : German Sustainability Strategy as **Annex BF 98**

1. National Strategy on Biological Diversity (2007)

Building on this abstract framework created by the DNA, the Federal Government adopted the National Strategy on Biological Diversity (NBS) in 2007.

B e w e i s : National Strategy on Biological Diversity (NBS) as **Annex BF 99**

As early as 2007, the NBS stated the following with regard to the national threat to biodiversity and the drivers responsible for it, which is consistent with the above statements:

"Due to its location in Central Europe, which was influenced by the ice ages, Germany is not naturally home to as many species as tropical countries, for example. We are home to around 9,500 plant species, 14,400 fungi species and around 48,000 animal species (a total of around four percent of the world's known living fauna). Some species became extinct a long time ago or became extinct more recently (among mammals, for example, the moose [18th century], the brown bear [19th century] or the alpine bat in the mid-20th century). In Germany, the endangerment (increased probability of extinction) of species and the impairment or destruction of habitats is a major problem, which is accompanied by the impoverishment and leveling of nature and landscape. According to the current Red List, 26.8 percent of Germany's approximately 3,000 native ferns and flowering plants are endangered (and 1.6 percent are extinct or lost). Of Germany's native animal species, 36 percent are endangered (and three percent are extinct or lost). Of the habitats found in Germany, 72.5 percent are endangered. With these endangerment rates, Germany has some of the highest values in Europe.

The reasons for the endangerment of species in Germany have been sufficiently investigated:

- direct destruction and fragmentation of habitats (settlement construction, traffic routes, excavations, land consolidation, draining, filling of watercourses, changes of use in agriculture and forestry). In the years 2001 to 2004, 115 hectares were newly used for settlement and transportation purposes every day. The settlement and transport area increased by a total of 1,682 square kilometers during this period. Undissected, low-traffic areas of at least 100 square kilometers in size now only cover 23 percent of the state's area (North Rhine-Westphalia: three percent, Mecklenburg-Western Pomerania: 54 percent). This means that the habitat for wild species is considerably restricted.

- Intensive land use in agriculture (this includes plant protection measures, fertilization, mowing several times a year, use of mowing equipment harmful to small animals, drainage of wet meadows and fens, conversion of grassland into arable land, excessive livestock numbers). Abandonment of the agricultural use of ecologically valuable marginal sites (e.g. nutrient-poor grasslands, mountain meadows, heaths, wet and wet meadows).

- local deficits in forest management (the insufficient proportion of old-growth and decay phases as well as of hollow trees and deadwood, structurally poor stands, tree species not suited to the site, inappropriate forestry technology and timber harvesting methods).

- Hydraulic engineering (straightening of watercourses, technical flood protection, water level regulation and damming of watercourses and waterways, leveling of riverbed and bank structures through development, excavation and shoring).

- Input of pollutants and nutrients (Despite the emission reductions achieved, the acid and nitrogen inputs from air pollution into the forest ecosystems are still so high that they exceed the natural acid buffering capacity or nitrogen absorption capacity of most forest sites. The pollution limit for eutrophying substances is exceeded on around 90 percent of the forest area).

- unsustainable fishing practices (e.g. overfishing, unselective or destructive fishing practices, stocking of waters with non-native species).

- recreational uses that are harmful to nature (including outdoor sports if they are not practiced in a nature-friendly manner).

- Climate change (It is assumed that average temperatures in Europe will rise by between two degrees Celsius and 6.3 degrees Celsius by 2100 compared to 1990. This would have a profound impact on biodiversity, for example distribution, migration and reproduction patterns.

- invasive alien species.

Germany has a special responsibility for the preservation of

- Species that are endemic to Germany or Central Europe, i.e. only occur here,

- *Species that have their worldwide distribution focus in Germany or Central Europe,*
 - *migratory species, of which significant parts of the world population rest or overwinter in Germany,*
 - *native species that are highly endangered or threatened with extinction in Germany and neighboring areas, as well as habitats that occur exclusively or primarily in Germany*
- and ecosystems."*

B e w e i s : National Strategy on Biological Diversity (NBS) as Annex BF 99, p. 17 et seq.

Based on this threat situation, the Federal Government has developed a vision under Chapter B. of the NBS to preserve biological diversity for people living today and for future generations, which should serve as a long-term orientation and take ecological, economic and social aspects into account. A differentiated subdivision into the following areas and the formulation of a target for each sub-goal was undertaken:

- B.1 Protection of biological diversity with the sub-objectives B.1.1 Biodiversity (species diversity, diversity of habitats and genetic diversity of wild animal species); B.1.2 Habitats (forests, coasts and seas, lakes, ponds, pools and ponds, rivers and floodplains, moors, mountains, groundwater ecosystems); B.1.3 Landscapes (wilderness areas, cultivated landscapes, urban landscapes;
- B.2 Sustainable use of biological diversity with the sub-goals B 2.1 Nature-friendly management; B.2.2 Exemplary role of the state, B.2.3 Effects of German activities on biological diversity worldwide; B.2.4 Agriculture, B.2.5 Land use; B.2.6 Extraction of raw materials and energy production; B.2.7 Land use for settlement and transport
- B.3 Environmental impacts on biodiversity
- B.4 Genetic resources
- B.5 Social awareness

For example, the following target definition can be found (p. 26 et seq.):

"B.1.1.1 Biodiversity as a whole [...]

Our goal is:

The decline in biodiversity in Germany has been halted by 2010 in accordance with the EU's Gothenburg target. After that, a positive trend development will take place.

B.1.1.2 Biodiversity [...]

Our goals are:

The decline in the current diversity of wild species will be halted by 2010. After that, there will be a trend reversal towards a higher diversity of native species in the area. [...]."

This is followed by Chapter C., which identifies fields of action with concrete measures for implementing the action targets. As a mere strategy of the Federal Government, the NBS is not legally binding. Consequently, the ongoing loss of biodiversity has so far remained unaffected by the strategy, as the Federal Government itself has also stated:

2. Accountability report and indicator report of the Federal Government on the implementation of the NBS (2021 and 2023)

The Federal Government reports on the implementation status of the NBS in each legislative period, most recently in the 2021 Accountability Report dated 10.08.2021, which covers the period from 2017 to 2021.

A s s e s s : Statement of accounts 2021 dated 10.08.2021 as **An-nex BF 100**

In conclusion, it was stated that many NBS activities were effective and could promote biodiversity, but that **no trend reversal was discernible**. Accordingly, even according to the German government's own assessment, the accountability report shows that the **majority of the strategy's objectives have still not been achieved to a sufficient extent**, even though many of the strategy's objectives were focused on the target year 2020 and would expire in the course of this year.

B e w e i s : Statement of accounts 2021 dated 10.08.2021 as Annex BF 100, p. 140 et seq.

The federal government therefore wants to realign the NBS and launched a public consultation process on June 15, 2023 for the new edition and presented a draft of the NBS 2030 (see below).

The Federal Government's reporting is divided into individual subject areas and only excerpts of the results will be presented here. Protected areas, Natura 2000 and the biotope network are considered under B.4.1, which once again confirms the findings presented here (see Part 1 A. I. 2.):

"According to the 2019 Habitats Directive report, a favorable conservation status has been achieved in 30 percent of the 195 regional assessments of the 93 habitat types (habitat types), 32 percent have an unfavorable-insufficient conservation status and 37 percent have an unfavorable-poor conservation status. Compared to the 2013 report, the conservation status of habitat types deteriorated in 15 regional assessments.

In 2017, the Federal Agency for Nature Conservation published the Red List of

Endangered Biotope Types in Germany for the third time. It shows the current endangerment situation of the biotope types found in Germany. For the first time, in addition to the long-term endangerment, the development trend and rarity of each biotope type have been combined to form a "Red List status" that reflects the risk of loss. Even though there has been an improvement compared to the last version of the Red List of Endangered Biotope Types in Germany

Although there have been some positive developments since 2006, the threat situation remains very tense. Almost two thirds of the biotope types found in Germany continue to show an overall threat, albeit to varying degrees, and an associated risk of loss. In particular, the situation has worsened for many grass-land biotopes that depend on extensive agricultural use. There have been positive developments in coastal and watercourse biotope types in particular. The endangerment situation has stabilized for some woody and forest biotopes (such as pollarded trees, forest edges and some types of alluvial forest)."

A s s e s s : Statement of accounts 2021 dated 10.08.2021 as Annex BF 100

In a further step of the accountability report, Chapter C evaluates achievements, for which various indicators are used to measure success. When it was adopted in 2007, the NBS contained an initial set of indicators for future reporting. The set of indicators was supplemented and further developed in the following years (2010, 2014, 2019). The current 18 indicators of the National Strategy on Biological Diversity are divided into five thematic areas as follows

- Components of biodiversity (7 indicators),
- Settlement and traffic (2 indicators),
- Economic uses (7 indicators),
- Climate change (1 indicator),
- Social awareness (1 indicator).

The following class limits apply to the degree of target achievement, which the federal government itself then characterizes as poor:

	Zielerreichungsgrad ≥ 90 %	Der aktuelle Wert liegt innerhalb des Zielbereiches.
	Zielerreichungsgrad 80 % bis < 90 %	Der aktuelle Wert liegt in der Nähe des Zielbereiches.
	Zielerreichungsgrad 50 % bis < 80 %	Der aktuelle Wert liegt noch weit vom Zielbereich entfernt.
	Zielerreichungsgrad < 50 %	Der aktuelle Wert liegt noch sehr weit vom Zielbereich entfernt.

"3.1 STATUS AND TRENDS 2020

The balance for all of the current 18 indicators of the National Strategy on Biological Diversity based on the data deliveries evaluated up to March 2021 is as follows

For a total of 13 indicators with quantitative target values, a degree of target achievement (status) can be specified, which is calculated from the distance between the last reported data point and the target value. According to this, the values of 11 indicators with a specific target value are still far or very far from the target range. For the "landscape fragmentation" indicator, the last reported value from 2015 is within the target range. However, this value has fallen below the 2005 value. The value for the "sustainable forestry" indicator is close to the target range. The target values for the indicators "Ecological water status", "Agricultural land with high nature value" and "Awareness of biodiversity" were already to be achieved in 2015, but are still not being met. The target value for the "sustainable forestry" indicator still relates to the year 2010. The other target values, insofar as they are linked to a specific target year, apply to the years 2020 and 2030."

B e w e i s : Accountability Report 2021 of the Federal Government
on the implementation of the National Strategy on Biological Diversity (BMU, 10.08.2021) as Annex BF 100

A more detailed presentation of the indicators can be found in the Federal Government's indicator report, which was last updated in 2023. In particular, no improvement is discernible. The most important information on the 18 indicators of the 2007 NBS is presented once again in an overview with data as of September 2022 in Chapter 3 Overall assessment. For a total of 13 indicators with quantitative target values, a degree of target achievement (status) can be specified, which is calculated from the distance between the last reported data point and the target value:

"According to this, the values of 11 indicators with a concrete target value are still far or very far from the target range. According to data availability, some of the last values for the indicators were recorded several years ago. For the indicators "Conservation status of FFH habitats and FFH species", "Status of floodplains", "Landscape fragmentation" and "Genetic diversity in agriculture", no more recent data was available than the data already published in the 2019 Indicator Report (BMU 2020) or the 2021 Accountability Report (BMU 2021). All other indicators could be reported with more recent data. For the "landscape fragmentation" indicator, the most recently reported value from 2015 is within the target range. However, this value has fallen below the 2005 value. In addition, the current value of the "sustainable forestry" indicator is still within the target range. The target values for the indicators "Ecological water status", "Agricultural land with high nature value" and "Awareness of biodiversity" were already to be achieved in 2015, but are still being missed. The target value for the "sustainable forestry" indicator still relates to the year 2010. The other target values, insofar as they are linked to a specific target year, apply to the years 2020 and 2030 (...)

The measures taken to date are not sufficient to achieve all aspects of the targets set out in the National Strategy on Biological Diversity. The development of the indicators shows that in some cases the trend has not yet been reversed and in other cases progress towards achieving the targets is very slow. Although many of the measures formulated in the fields of

action of the National Strategy on Biological Diversity have already been tackled, the resulting positive effects are often still a long time coming. One reason for this is that it has not yet been possible to reduce pressures to a sufficient extent. On the other hand, populations of animal and plant species and biotopes often require long periods of time to regenerate, which is why successes can only be reflected in the values of the indicators on the status of species and habitats after a considerable delay. In addition, some indicators are only updated at relatively long intervals and for other indicators the compilation of data is very time-consuming, meaning that the last reported values are sometimes several years old. The conservation of biodiversity remains a key task for Germany in the future."

B e w e i s : Indicator report as **Annex BF 101**

3. Draft of the National Strategy on Biological Diversity 2030

In 2023, the BMUV presented a discussion proposal for updating the National Strategy on Biological Diversity 2030, which included the following description of the state of biodiversity in Germany (it should be noted that the strategy has still not been finalized after more than a year, although the GBF would require precisely such a strategy):

"Despite considerable efforts and some successes in protecting individual species and habitats in recent years, biodiversity continues to dwindle in Germany too:

- According to the Red Lists of animals, plants and fungi, around 25 % of the approximately 40,000 species and subspecies assessed in Germany are endangered, extinct or lost. Around 31 % of plants, 20 % of fungi and lichens, 35 % of vertebrates and 32 % of invertebrates are endangered, extinct or lost.

- Many species in the agricultural landscape are suffering considerable population declines. For example, 70% of open land birds are considered endangered, and 13% are already on the early warning list.

- A study has shown a decline in the total biomass of flying insects in protected areas of by around three quarters since 1989.

- In the case of butterflies, beetles and dragonflies, a third to a quarter of species in Germany are endangered or extinct. In total, almost 34% of the almost 14,000 insect species assessed in the Red Lists are endangered or extinct. Over the last 25 years, the populations of wild bees have declined by around 42%.

- The situation is similarly poor for habitats. Almost 70 % (in terms of numbers) of the habitats found in Germany are in an inadequate or poor condition, especially grassland used for agriculture, but also inland waters and moors.

- The 2017 Red List of Endangered Biotope Types in Germany showed that almost two thirds of the biotope types found in Germany are still endangered, albeit to varying degrees."

Beweis: BMUV, Discussion proposal, p. 2 et seq. <https://dialog.bmu.de/bmu/de/home/file/fileId/810/name/Ziele-%20&%20Ma%C3%9Fnahmenkata-log%20zur%20NBS%202030.pdf> as Annex BF 102

If one compares this list with the cited description of the situation from 2007, it must be noted that in the last 17 years (!), despite knowledge of the effects and drivers of biodiversity loss, it is evident that, in the opinion of the Federal Government itself, no sufficient measures have been taken to bring about an improvement. In view of this, it is also questionable whether the measures now proposed are suitable to bring about the necessary trend reversal.

As part of the further development of the objectives, the draft mentions the existing fields of action and also formulates overarching objectives to reduce negative impacts on biodiversity in the fields of climate change; energy transition and raw materials; substance inputs and other impacts on ecosystems; economy, financial flows and consumption; nutrition and health; transport infrastructure and tourism. The following is formulated under 2.1 "Reversing trends in species diversity and intraspecies diversity":

"By 2030, the decline in the current diversity of wild species naturally occurring in Germany and their intraspecific diversity has been halted. By 2050, the population situation of wild species naturally occurring in Germany will have improved considerably, the risk of extinction at regional level will have been minimized and intraspecies diversity will have been preserved. [...]"

Measures for the 1st action plan 2024-2026:

Species support programs

- By 2026, the national species support programme will implement initial measures for the species prioritized under the NBS in addition to the species particularly affected by the expansion of renewable energies.

- By 2026, the feasibility of national species support programmes and species support programmes of the federal states will be examined for all species classified as endangered throughout Germany for which Germany has a high or particularly high responsibility, and a prioritization will be made as to which species action plans should be drawn up. Measures are being implemented for at least 25% of the species.

- By 2026, a database of all ongoing species assistance programs and measures of the federal government, the federal states and associations will be set up for the cross-state exchange of all actors involved and as a basis for better evaluation. [...]"

In the case of the proposed targets and measures cited, which are reproduced here as examples, it is initially clear that these still exhibit a high degree of vagueness and that no evidence is provided that the targets can (actually) be achieved. However, particularly in view of the ongoing failure to meet targets and the continuing poor state of affairs, it is imperative that ambitious and well-founded measures are regulated. Irrespective of this, however, it is particularly clear that the deadlines for the targets set back in 2007 are being

postponed by several decades in some cases. This is all the more serious as the conservation of biodiversity (and thus the halting of its loss and its restoration) has been legally required by the CBD since 1993.

It therefore remains the case that the threat posed by biodiversity loss and the drivers and impacts have been known for several decades and that, despite various (political) objectives, a trend reversal in the protection of biodiversity has not been achieved. Other documents, such as the EU review of German environmental policy, come to similar official conclusions (see, for example, COM, SWD(2022) 265 final). Based on the history outlined above, it is clear that these (executive) declarations of intent are not sufficient, but that a legally binding, i.e. legally comprehensive protection concept is required - which not only resolutely addresses protected areas and species, but also the drivers of their destruction.

The SRU statement from 2024, which has already been quoted many times, underlines all of this once again. As part of the summary, the SRU states:

"The condition of many ecosystems in Germany has continued to deteriorate over the last few decades despite numerous and sometimes effective nature conservation efforts. Therefore, the remaining nature must not only be protected, but its condition must also be actively improved."

B e w e i s : SRU/ WBBGR/ WBW, [Statement April/ August 2024](#) as
Annex 58, p. 5

II. Special law and its insufficient level of ambition

The existing specialized law is not suitable to justify the lack of a comprehensive legal protection concept or to replace such a concept. In detail:

1. Nature use law, in particular agricultural law

After the presentation of the strategies, which are often quite welcome in their objectives but are not legally binding, whose objectives are also constantly missed and which therefore do not do justice to the conservation of biodiversity, which has been required by the CBD since 1993, the legal situation must be examined in more detail. It will be shown that the drivers of biodiversity loss are inadequately regulated and that the original nature conservation law, with its requirements for protected areas, species protection and general land protection (especially through the impact regulation under nature conservation law), does little to counteract this. First of all, the core problems of nature use law are presented here. In the following three sections (Part 1 B. II. 2.-4.), the original nature conservation law is then presented.

The following key findings can be made with regard to the law on the use of nature, in particular agricultural law, but also energy law:

- Based on the Federal Government's own "stocktaking", which has already been extensively quoted above and which was determined as part of the strategies and their updates, monitoring and accountability reports, together with the other facts presented in the facts, it is already clear that, overall, the existing legal regulations with relevance for biodiversity are clearly not sufficient to ensure the conservation of biodiversity. Together with the findings on the drivers of biodiversity loss, it is therefore clear that these drivers - in particular agriculture in its current form with its extensive livestock farming - have not yet been sufficiently regulated by law. **In this respect, in our opinion, it is not necessary to take a closer look at existing special legislation, as this is clearly not suitable for ensuring the protection of biodiversity. Rather, the rapid and so far barely slowed loss of biodiversity is the result of previous non-regulation, on the one hand through the authorization of biodiversity-damaging activities, for example in agricultural, energy and transport law (or even the subsidization of previous agricultural practice) and on the other hand through the lack of protection regulations, especially in nature conservation law (see also explicitly recital 85, among others, of the Nature Restoration Law). This is precisely what triggers the overall need for a comprehensive legal protection concept** (which is to be described in more detail in Part 2 of the notice of appeal). This is not altered by the fact that individual sectoral legal regulations also serve to protect biodiversity, as these have in any case not slowed down the loss of biodiversity as a whole and do not represent a comprehensive protection concept.
- In the following, it is shown by way of example that the part of the law geared towards the use of nature allows and thus causes the biodiversity-destroying actions and conditions described in Part 1 A. I. 3. (and in the following sections the insufficiency of the original nature conservation law is also shown).
- As explained above, most of the biodiversity loss is due to intensive agriculture. And as also explained, the majority of agricultural land use is used for the production of animal foodstuffs, which means that the loss of biodiversity due to land use changes (e.g. in order to have large cleared areas for the cultivation of animal feed), over-fertilization, excessive pesticide exposure, etc. is largely a consequence of this very livestock farming (Part 1 A. I. 3.). Nevertheless, agricultural law permits animal husbandry practically without limit (see Weishaupt et al, Sustainability 2020, 2053). This is all the more worrying as animal husbandry is also one of the main drivers of climate change - and this is another driver of biodiversity loss, as described above. In addition, rampant livestock farming also causes a high demand for land for the cultivation of animal feed, which not only has a negative impact on biodiversity through fertilization, pesticide use, land clearing, etc., but also makes areas for possible nature reserves scarce. Conversely, if livestock farming were effectively limited, both the impact on nature and the availability of land for nature conservation purposes would change fundamentally. With regard to all of this, it can be argued that, in addition to a significant reduction in animal husbandry, more species-appropriate (especially pasture) husbandry and feeding of animals could also significantly improve the biodiversity and sometimes also the climate balance (see Weishaupt et al, Sustainability 2020, 2053). This is because the current

law does not contain any tangible obligation in this respect either.

- For fertilizers and pesticides, minimum requirements are set for the products and individual framework conditions are also set for their use (for example, individual pesticides are completely banned due to their particularly high harmfulness), particularly in the Plant Protection Act, the Fertilizer Act and the Fertilizer Ordinance. This applies to the production of both plant-based foodstuffs and animal feed. However, excessive fertilization and the widespread use of pesticides have so far been legally permitted, at least outside protected areas under nature conservation law and thus on the vast majority of land, and even the existing marginal requirements (such as the reduced fertilization aimed for in Section 13a DüV) are subject to a broad, systematic enforcement deficit, among other things because the multitude of individual agricultural processes is almost impossible for the competent authorities to keep track of and therefore almost impossible to monitor; and general clause-like requirements such as those of "good professional practice" in Section 3 PflSchG and Section 11a DüngG have no contours from the outset that could lead to a real limitation (described in detail in Wolf, NuR 2023, 6 et seq.; Douhaire, ZUR 2018, 464 et seq.; Douhaire, Rechtsfragen der Düngung, 2019; Faßbender, in: Köck/ Markus/ Reese (eds.), Zukunftsfähiges Umweltrecht I, 2023, 185 (215 et seq.)). The fact that the EU has set itself the target of halving the use of pesticides by 2030 in the - not legally binding - Farm-to-Fork Strategy also lacks any instrumental implementation (for more details, see Heyl et al, Frontiers in Sustainable Food Systems 2023, 103389). Even the detour via water law regulations on nitrate input, as it stems in particular from fertilization, have not yet brought about any far-reaching limitation regulation in national law, especially in the form of Art. 5 para. 4 Nitrates Directive (see Wolf, NuR 2023, 6 (15) for a more detailed account of the dispute between the EU Commission and the Federal Government on this issue, which has been smouldering for 25 years).
- Furthermore, the agricultural subsidies based on EU law (Common Agricultural Policy / CAP) continue to reward precisely the intensive agricultural model that triggered the loss of biodiversity, despite individual ecological requirements. According to scientifically undisputed opinion, the latest reform of the CAP 2022 has done little to change this, because its selective requirements for biodiversity protection ("greening") as a prerequisite for direct payments to farmers do not eliminate the basic facts of excessive animal husbandry and excessive fertilization and pesticide use (for details and criticism of the reform, see Heyl et al, RECIEL 2020, 12351; Heyl et al, Sustainability 2022, 15859; Wolf, NuR 2023, 6 et seq.; on the criticism of agricultural law in general from a biodiversity perspective, see Möckel, ZUR 2014, 14; Czybulka/ Fischer-Hüftle/ Hampicke/ Köck/ Martinez NuR 2021, 227 et seq. and 297 et seq.; Faßbender, in: Köck/ Markus/ Reese (eds.), Zukunftsfähiges Umweltrecht I, 2023, 185 (215 et seq.)). Consistent rewetting of peatlands has also not yet been tackled.
Most recently, the European Court of Auditors explicitly stated that EU agricultural subsidies are incompatible with the EU's environmental and biodiversity policy intentions (European Court of Auditors, Special Report 20/2024).

- None of this is rendered obsolete by reference to current legal developments (which may not yet have been able to slow down the loss of biodiversity). On the contrary, the cautious - and, as mentioned, inadequate - attempts to green EU agricultural subsidies since 2020 were partially reversed in 2024 in the wake of the so-called farmers' protests. This was done by amending the Strategic Plan Regulation and the Horizontal Regulation with regard to the environmental requirements for direct payments. The standards for the good agricultural and environmental condition of land (GAEC standards) were amended, for example by largely abolishing the fallow obligation (GAEC 8) and making specific exceptions for protection against erosion (GAEC 5), minimum soil cover (GAEC 6) and crop rotation (GAEC 7). This actually counteracts the protection of biodiversity and ecosystems in the context of agriculture. Although the increasing digitalization of agriculture - for example through the design of EU agricultural subsidies - can theoretically help to reduce the use of fertilizers and pesticides, in practice it also leads to an intensification of land use, which partially or, in the worst case, completely levels out the ecological effects of digitalization (Garske et al, Sustainability 2021, 4652; Heyl et al, NuR 2022, 837 et seq.).
- The use of fossil fuels in the agricultural context - which keeps the large-scale agriculture tied to large machines and intensive fertilization going and also triggers climate change as a further factor damaging biodiversity (in addition to animal husbandry) - is also only regulated to a limited extent by law. Parallel to the present constitutional complaint, three constitutional complaints are pending before the Federal Constitutional Court, which, in the course of the 2024 amended KSG, object, among other things, to the level of ambition of German climate policy and state that the climate targets contained in Section 3 KSG, among others, do not aim for timely post-fossilization. The complainants in the proceedings with the file number 1 BvR 2098/24 include the complainant re 6. Reference is hereby made in full to the facts presented there. However, if climate change is not consistently combated, its effects that are damaging to biodiversity will continue to be accepted by legislation. In addition, the inadequate energy transition so far (instead of focusing on rapid post-fossil fuel efficiency, for example with expanded emissions trading, with stricter caps and also for livestock farming, and instead of tackling real obstacles to renewable energy expansion such as insufficient digitalization and staffing) is still partly associated with a dismantling of biodiversity-protecting procedural rules in administrative law (for more details, see Schütte/Langstädtler, ZUR 2024, 3 et seq.; Groß, ZUR 2021, 75 et seq.; Groß, JZ 2024, 893 (903)). This further exacerbates the situation for biodiversity.

2. Nature conservation law

In the alternative, as announced, it is shown below that the legal regulations of nature conservation law, some of which have been in place for decades, do not provide sufficient protection for biodiversity, even in their interaction.

German (and European) nature conservation law only selectively changes the fact that the ongoing destruction of biodiversity and ecosystems is being legalized.

The Federal Nature Conservation Act (BNatSchG) lists the permanent safeguarding of biological diversity in accordance with the respective degree of endangerment in the target provisions (Section 1 (2) BNatSchG). Accordingly, viable populations of wild animals and plants and their habitats are to be preserved and the exchange between them as well as migrations and reintroductions are to be made possible (Section 1 para. 2 no. 1 BNatSchG). Threats to ecosystems, biotopes and species must be counteracted (Section 1 para. 2 no. 2 BNatSchG). Biotic communities and biotopes with their structural and geographical units are to be preserved in their representative distribution (§ 1 para. 2 no. 3 BNatSchG).

For agriculture as the main driver of biodiversity loss in Germany, Section 5 (2) No. 1 BNatSchG stipulates that, in addition to the requirements arising from the regulations applicable to agriculture and Section 17 (2) of the Federal Soil Protection Act, the following "principles of good professional practice" must be observed in agricultural use. However, the practiced "good professional practice" has not slowed down the development of agricultural land use towards intensive farming, but rather intensified it, because there is a lack of enforcement and, moreover, agriculture - as the main polluter of biodiversity - is excluded from the intervention regulation and the approval requirement for water uses (Wolf, ZUR 2022, 195 (197); Wolf, NuR 2023, 6 et seq.). According to the case law of the Federal Administrative Court, no specific, directly applicable obligations to act that define "good professional practice" can be derived from Section 5 BNatSchG (see BVerwG, judgement of 01.09.2016, 4 C 4.15), so that the reference to good professional practice ultimately comes to nothing (see Wolf, ZUR 2022, 195 et seq.), because violations of the standardized requirements generally have no legal consequences (see, for example, BeckOK UmweltR/Brinktrine, 71st ed. 1.1.2022, BNatSchG § 5 para. 24 with further references). For the majority of the area, it therefore remains the case that there are no substantial restrictions on animal husbandry, fertilization, pesticide use or drainage of moorland sites - not even under nature conservation law.

The European legislator has also formulated requirements and objectives for the protection of biodiversity. In particular, the Habitats Directive (Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora - Habitats Directive) and the Birds Directive (Directive 2009/147/EC on the conservation of wild birds) should be mentioned here. They aim to safeguard and protect wild species, their habitats and the Europe-wide connectivity of these habitats, and are intended to preserve and protect biodiversity in this way. Fundamentally, they aim to achieve a favorable conservation status of species and biotopes and are intended to help secure the obligations arising from the CBD. These provisions of Union law have been transposed into national law, in particular in Sections 42 et seq. and 32 et seq. BNatSchG have been transposed into national law. In addition, the aforementioned WFD (more on this in the next section) should also be mentioned, which aims to protect aquatic and water-dependent habitats and ecosystems and to restore water bodies and groundwater to a good status - and which has been transformed into national law with the provisions of the WHG. As the member states have extensive monitoring obligations towards the EU Commission for the implementation of these European directives, the monitoring reports of the Federal Republic of Germany provide an insight into the

effectiveness of nature conservation law and at the same time underline the findings already presented on the state of biodiversity in Germany and the question of whether the relevant objectives have been achieved.

According to an evaluation of the current Habitats Directive and Birds Directive report (2019/2020), the picture is bleak. As already mentioned, only 30 % of the 93 habitat types (habitat types) in Germany have a favorable conservation status, 32 % have an unfavorable-insufficient conservation status and 37 % even have an unfavorable-poor conservation status.

B e w e i s : BMU, Die Lage der Natur in Deutschland - Ergebnisse von EU-Vogelschutz- und FFH-Bericht as **Annex BF 103**, p. 5

The picture for species is equally inadequate, with only 25 % of species of Community importance having a favorable conservation status, 30 % an inadequate status and 33 % a poor status. While the situation for mammal populations is still relatively favorable, it is particularly critical for dragonflies, reptiles and other animal species, where only very few or in some cases no species have a favorable conservation status. In terms of trends, only 50 % of species and 54 % of habitats have a stable or improving trend, while 34 % and 41 % respectively have a deteriorating trend.

B e w e i s : BMU, Die Lage der Natur in Deutschland - Ergebnisse von EU-Vogelschutz- und FFH-Bericht, as **Annex BF 103**, p. 8

The trend for breeding bird species is largely balanced, with around one third each showing increasing, stable or decreasing trends; five species have become extinct since 1980.

B e w e i s : BMU, Die Lage der Natur in Deutschland - Ergebnisse von EU-Vogelschutz- und FFH-Bericht, as **Annex BF 103**, p. 9

In view of the objective of achieving a favorable conservation status for all habitats and species of Community importance, it must be stated that the objectives of biodiversity protection with regard to habitats and species continue to be flagrantly missed.

This result can also be stated for the biotope network or ecological network system anchored in the Habitats Directive, which is of particular importance for the conservation of biodiversity to enable exchange and further distribution. The legislator's goal contained in Section 20 (1) BNatSchG, according to which at least 10% of the area of each (federal) state should comprise a network of connected biotopes, has so far remained an unachieved legislative goal. Despite the inclusion of the NATURA 2000 network and other national protected area categories, there are still gaps in the biotope network and it has not been completed (see BfN, Die Umsetzung des länderübergreifenden Biotopverbunds - rechtliche, strategische, planerische Aspekte, 2017, p. 9).

These figures, which specifically reflect the degree to which the EU Natura 2000 regime

and the protection provisions for species protection have achieved their objectives, show that the EU regulations on species and habitat protection - which, according to the preamble, focus on the conservation of biological diversity in the form of the conservation and restoration of natural habitat types and wild animal and plant species - have not yet been able to achieve this objective either. In view of the diverse drivers described in more detail above and the fields of action based on them, it is already clear that (even if fully implemented and strictly enforced in practice) this can only be part of the measures required to halt biodiversity loss. At the same time, practical experience shows that despite the fact that the two directives have now been in force for decades, it has not been possible to achieve anything like a trend reversal.

The implementation status of the Birds Directive, which was enacted in 1979 and recodified in 2009 (Directive 2009/147/EC), is so deficient in Germany that the EU Commission once again initiated infringement proceedings against Germany on 13.03.2024.

B e w e i s : Press release of the EU Commission dated 13.03.2024
as **Annex BF 104**

And apart from the fact that the selective area and species protection regulations are not only implemented in individual cases, but are obviously systematically inadequate, individual area and species protection standards cannot replace a comprehensive legal protection concept for biodiversity.

The impact regulation under nature conservation law of §§ 14 et seq. BNatSchG cannot. According to the wording of the standards, these regulations require at least the minimization of interventions and their compensation since the regulation was first created with the BNatSchG in 1976. However, it too has not been able to stop the creeping deterioration of ecosystems and the loss of biodiversity in its regulation and implementation, as has been repeatedly and unanimously noted (cf. pars pro toto with further references Wolf, NuR 2023, 6 et seq.).

3. Supplementary nature conservation law: Water law

Beyond nature conservation law, there are other regulatory approaches that may also aim to protect biodiversity and ecosystems. However, these too have so far done little to change the findings on the ongoing loss of biodiversity.

The WFD, for example, creates a regulatory framework - which is also relevant for ecosystems - for the protection of inland surface waters, transitional waters, coastal waters and groundwater. According to Section 27 para. 1 no. 2 WHG, surface waters must be managed in such a way that a "good ecological status" or "good ecological potential" (Section 27 para. 2 no. 2 WHG) is achieved. To this end, action plans (Section 82 WHG) and management plans (Section 83 WHG) must be drawn up, as already mentioned. Groundwater must be managed in such a way that any deterioration in its quantitative and chemical status is avoided (Section 47 para. 1 no. 1 WHG) and any significant trends in rising pollutant concentrations due to the effects of human activities are reversed (Section 47 para. 1 no. 2

WHG). The WFD stipulated that, in principle, the specified environmental objectives should be achieved no later than 15 years after the directive comes into force - i.e. 2015. Despite these promising targets, achieving the objectives of the WFD is still a long way off, although corresponding management plans and programs of measures have now been drawn up in three management plan periods.

It has been proven that the situation in Germany with regard to the aquatic environment in the form of water bodies, seas and water-dependent ecosystems (floodplains, moors, etc.) is highly deficient in terms of target achievement despite the requirements of the WFD and its national implementation regulations. The objectives of the WFD, namely to achieve good status for both water bodies and groundwater by 2015, were missed by a wide margin, so that extensive deadline extensions became necessary. At the time of the original target achievement, only 8.2 % of water bodies met the required very good or good ecological status or ecological potential (see Federal Ministry for the Environment, Nature Conservation and Nuclear Safety and Federal Agency for Nature Conservation, Die Wasserrahmenrichtlinie - Deutschlands Gewässer 2015, 2016, p. 18). 36.1 % were in moderate ecological status, 33.8 % in unsatisfactory status and 19.2 % in poor ecological status. The failure rate for the chemical status of water bodies was as high as 100 percent, which can be attributed to the widespread exceedance of the limit values for ubiquitous substances and the so-called "one-out-all-out" rule. The picture was slightly better for groundwater, with 95.7 % of groundwater bodies achieving good quantitative status in the water-rich country, while only 63.7 % achieved good chemical status and the rest were assessed as poor (see BMU and BfN, Die Wasserrahmenrichtlinie - Deutschlands Gewässer 2015, 2016, p. 21).

The goal of protecting biodiversity from the water side was thus flagrantly missed. Accordingly, specialist court decisions on management planning under the WFD attest to fundamental failures on the part of the Federal Republic of Germany in implementing the objectives of the WFD (see OVG Lüneburg, judgment of 21.11.2023, Ref.: 7 KS 8/21 - juris).

Furthermore, the Marine Strategy Framework Directive (MSFD) from 2008 serves to protect and preserve the European marine environment. The aim is to preserve or restore clean, healthy and productive seas in the long term. Deterioration of the status must be prevented. Article 11 "Monitoring programs" stipulates that Member States shall establish and implement monitoring programs for the ongoing assessment of the environmental status of their marine waters. Biological characteristics, such as the occurrence and population dynamics of numerous marine animal and plant species, are also to be taken into account. The most recent status report for German North Sea and Baltic Sea waters was in 2018, and the update from 2024 is already available in draft form. As already stated in the facts (in Part 1 A. I. 4.a.), the status of marine waters and their inhabitants is also largely not good.

4. No significant change due to the new EU Nature Restoration Law

Up to this point, it can be stated: If the law still promotes and permits the destruction of nature, this can only be compensated for in certain areas, for example by placing individual

areas or species under special protection under nature conservation law (especially as there are also considerable enforcement deficits there, as shown). It is to be welcomed that the EU adopted the aforementioned Nature Restoration Law in summer 2024. It is intended to partially remedy damage to nature in the EU member states by 2050. The regulation sets targets for the restoration of nature in various ecosystems and requires the member states to develop corresponding concepts.

Art. 4 to 10 of the Nature Restoration Law standardize restoration objectives and obligations, namely for the European network of protected areas Natura 2000 and the habitats of species listed in Annexes II, IV and V of the Habitats Directive and Annexes I and II of the Birds Directive (Art. 4), for marine ecosystems (Art. 5), for urban ecosystems (Art. 8), for rivers and floodplains (Art. 9), pollinator populations (Art. 10), for agricultural ecosystems including peatlands (Art. 11) and for forest ecosystems (Art. 12). In essence - particularly in the basic standard of Art. 4 and then recurring in other standards - the obligation is established to restore 30, 60 and 90 % of the ecosystems covered by the regulation by 2030, 2040 and 2050 respectively. Articles 15-19 stipulate that restoration plans must be submitted by the Member States to the EU Commission every three years - and then updated every ten years. Art. 20-21 contain requirements for monitoring and reporting by the Member States to the Commission.

For various reasons, the Nature Restoration Law is a step forward in ecosystem protection, but it is not sufficient in terms of the goal of preserving biodiversity, including an immediate halt to its loss (see also Henn et al, NuR 2024, 234 et seq.):

- (a) The regulation gives the states a further delay, in many cases until 2050. In view of the planetary boundaries that have already been exceeded, it is not possible to wait that long. In this respect, it is striking that the EU does not cite the obligation under Art. 1 CBD in the recitals of the Nature Restoration Law. It only mentions targets that are legally non-binding and have a more generous timeframe, such as the SDGs, the EU Biodiversity Strategy described above and the GBF. Art. 1 Nature Restoration Law also speaks of a "long-term recovery" of ecosystems and the "fulfillment of the Union's international commitments", namely "by 2050"; **however, Art. 1 CBD, which has long required the conservation of biodiversity, is again not mentioned here, and the commitment there to the conservation of biodiversity - and not only in the long term - is also not mentioned.**
- (b) The regulation primarily presents objectives. Whether appropriate measures follow remains open. In particular, the central Art. 4 (1) of the Nature Restoration Law stipulates: "Member States shall take the measures necessary ..." - **without, however, standardizing any responsibility for success** in actually achieving the targets set (according to the standard, the restoration of 30, 60 or 90 % of the ecosystems covered by the Regulation by 2030, 2040 or 2050). Art. 4 para. 11 of the Nature Restoration Law reaffirms this limited obligation. It therefore depends heavily on the good will of the Member States. However, in view of the ongoing loss of biodiversity and the previous failures to address the problem by means of an overall legal strategy, there are major doubts about this.
- (c) The objectives themselves are also unclear because, given the processual nature of

nature, they are not self-explanatory and should therefore have been described more precisely. **In addition, the objectives are also riddled with a number of important exceptions. Due to their considerable number, only the most serious are mentioned below:**

- In accordance with Art. 4 para. 2 of the Nature Restoration Law, frequently occurring habitat types can be excluded from the measures.
- According to Art. 4 para. 5, Member States may also set objectives other than the complete restoration of the affected areas.
- Furthermore, according to Art. 4 (8-9) of the Nature Restoration Law, Member States must first ensure - and not even for all, but only for most areas - that it is known what state they are in. This threatens to open up further potential for delays and dilution with regard to taking effective measures.
- In addition, there is a risk that nature-intensive projects may even trigger a deterioration of the ecosystem status in some areas, contrary to the objectives of the Regulation. Art. 4 para. 11-12 of the Nature Restoration Law merely obliges Member States to "endeavor" to prevent a "significant" deterioration. Art. 4 para. 14-15 also standardize explicit exceptions even from this obligation to make efforts, for example if this is in the "public interest" or if natural damage is caused by climate change. **The exclusion of climate change impacts threatens to render all the obligations of the regulation meaningless, as climate change can ultimately be seen as a contributory cause of the unfavorable condition of all ecosystems.**
- Moreover, only vague obligations apply to urban ecosystems in accordance with Art. 8 (1-2) of the Nature Restoration Law.
- For the **particularly important pollinator populations and agricultural ecosystems**, the requirements are also formulated much more vaguely in accordance with Art. 10 and 11 of the Nature Restoration Law.
- The validity of the Regulation can even be suspended altogether under certain conditions in accordance with Art. 27 Nature Restoration Law.

- (d) **The Nature Restoration Law does not address all relevant problem areas (e.g. those named in the GBF without obligation), including the drivers of the nature crisis** (see Part 1 A. I. above). For example, it does not make any statements on pesticides and thus on one of the main drivers of biodiversity loss. This is a serious omission insofar as effective biodiversity or ecosystem protection cannot be achieved solely through nature conservation law flanking an otherwise unchanged way of life and economy (and its legal representation in agricultural and energy law, for example). Rather, the drivers of destruction must be systematically taken into account in a comprehensive legal protection concept. **The Nature Restoration Law also does not specify a percentage that protected areas must have of the total area of a Member State such as Germany.** In addition to addressing the drivers of biodiversity loss, for example in agricultural and energy law, the network of protected areas

should also be strengthened. The fact that the requirements of the Habitats Directive are not sufficient for this is evident in the form of the continuing loss of biodiversity, particularly in the Natura 2000 sites themselves. Nevertheless, the Nature Restoration Law refrains from specifying the expansion of the protected area network. As a result, it once again remains unclear what concrete measures can actually be expected on the basis of the regulation.

- (e) The restoration plans, which the Member States must draw up to plan their measures, **do not have to be** submitted **for three years** and then **only reviewed every ten years** (Art. 16 and 19 (1) Nature Restoration Law). In view of the fact that biodiversity is constantly dwindling and should have been conserved under international law since 1993, this is clearly inadequate.
- (f) In Germany, although the Regulation only provides a framework and itself only prescribes restoration plans (in Art. 15 et seq. Nature Restoration Law) without legislative form, no comprehensive implementation law has been planned to date (Henn et al, NuR 2024, 234). Even the GBF with its far-reaching - albeit non-binding and too far into the future - declarations of intent has not led to binding implementation planning in Germany. Beyond the shortcomings listed here in terms of content, it must therefore be stated in terms of form alone: **A comprehensive, legally binding (!) protection concept will still not come as things stand today.**
- (g) The fact that the inadequate standards described above, the exceptions, the overly generous review and the unplanned German implementation law can have a massively unfavorable effect arises from two aspects over and above what has been said:
 - In the past, the EU has repeatedly standardized ambitious goals in nature conservation-related environmental law, which have not been achieved, but whose implementation has stalled in the federal system - legal acts that were less far-reaching and less controversial overall than the Nature Restoration Law, but which have apparently already met with massive resistance or at least unwillingness to be implemented. This is particularly evident in the case of the Water Framework Directive. The good status of all surface waters owed under Art. 4 para. 1 WFD, as well as the other objectives of the directive in Germany, has been missed by a wide margin by the standardized target date of 2015. And even now, in 2024, it is not possible to predict when this will be achieved. The only certainty is that by the time the WFD expires in 2027, its objectives will not even be close to being achieved.
 - It is also not possible to rely solely on the EU for possible obligations to preserve biodiversity (to be set out in detail in Part 2 of the constitutional complaint) because there are considerable contradictory legal developments in the EU. Contrary to the Nature Restoration Law are, for example, the almost simultaneously created changes in agricultural law, which have an impact on key drivers of biodiversity loss. As already explained (see Part 1 B. II. 1. above), the cautious attempts to green EU agricultural subsidies in 2024 were partially reversed in the course of the so-called farmers' protests. This has the effect of

further destroying rather than restoring ecosystems, considering the role of agriculture and especially animal husbandry, fertilization and the use of pesticides (see Part 1 A. I. 3. above). If we also consider the emergence of right-wing and left-wing populist forces in the EU Member States and in the 2024 European elections, most of which are largely opposed to environmental protection demands in their election manifestos, there are concrete indications that further pressure towards a watering down of ecological requirements is to be expected at EU level. This cannot be assessed in detail here. However, it underlines once again that Germany can only rely on the EU level to a very limited extent when it comes to preserving biodiversity.

The Nature Restoration Law is therefore at best a start, and real nature conservation depends on real legislative action in the fields mentioned (see also SRU/ WBBGR/ WBW, [Statement April 2024](#), p. 14). With reference to the BMU (Die Verordnung zur Wiederherstellung der Natur, <https://www.bmu.de/themen/naturschutz/wiederherstellung-von-oekosystemen/die-eu-verordnung-zur-wiederherstellung-der-natur>), some even assume that the Nature Restoration Law does not oblige the Member States to do anything new anyway, but only sets a concrete timeframe and differentiated and measurable (interim) targets for existing obligations (see Brückner, available at <https://www.petersenhardrahtpruggmayer.de/de/news/die-eu-verordnung-zur-wiederherstellung-der-natur/>).

From the complainants' point of view, the human rights obligation - confirmed by the CBD - that legislation must have a comprehensive protection concept for the conservation of biodiversity therefore remains unfulfilled by the Nature Restoration Law.

5. Conclusion on special law and strategies

It should be noted: The specialist legal regulations presented here are merely building blocks for the protection of biodiversity in order to bring about improvements in some areas of biodiversity protection. These are not only inadequate in themselves; they are also outweighed in their effect by regulations under agricultural and energy law in particular, which do not impose sufficient legal limits on key drivers of biodiversity loss such as intensive livestock farming, fossil fuels and climate change. In view of the fact that nature conservation regulations have also been in force for decades, it is clear that they alone are obviously not sufficient to reverse the trend. The totality of the current environmental and nature conservation regulations therefore does not provide a comprehensive legal protection concept for biodiversity, nor does it generate any particular development pressure or even planning security in this direction, but rather provides many dysfunctional regulations that are detrimental to biodiversity (Köck, EurUP 2024, 1 (7); Köck, ZUR 2019, 67 et seq.; Möckel, ZUR 2014, 14; Czybulka/ Fischer-Hüftle/ Hampicke/ Köck/ Martinez NuR 2021, 227 et seq. and 297 et seq.; Faßbender, in: Köck/ Markus/ Reese (eds.), *Zukunftsfähiges Umweltrecht I*, 2023, 185 (215 et seq.); Wolf, NuR 2023, 6 et seq.; Douhaire, ZUR 2018, 464 et seq.; Douhaire, *Rechtsfragen der Düngung*, 2019; Möckel/Wolf, NuR 2020, 736; Czybulka/Köck, *Forstwirtschaft und Biodiversitätsschutz im Wald*, 2022, p. 11 et seq.).

The German Nature Conservation Day, which is jointly organized by the BBN (Bundesverband Beruflicher Naturschutz e.V.), the DNR (Deutscher Naturschutzring e.V.), the BfN (Bundesamt für Naturschutz) and a host federal state, and which unites the voices of legal and scientific experts on biodiversity issues in Germany, therefore called in its Saarbrücken Declaration of 25 In its Saarbrücken Declaration of September 25, 2024, it therefore called for the introduction of a Biodiversity Conservation Act with sector targets and sanctions as an overarching instrument to implement the - pending - National Biodiversity Strategy 2030 and the restoration targets. However, there are no plans for a biodiversity protection act at federal level. The sectoral protection law for the individual components of biodiversity is thus, according to the relatively unanimous assessment of legal and specialist science, simply unsuitable and inappropriate for solving the problem, also in view of the degree of biodiversity loss that has already occurred and in view of the long regeneration periods (see also SRU/ WBBGR/ WBW, [Statement April 2024](#), p. 10; Calliess, ZUR 2024, 65 (66); ders. *Rechtsstaat und Umweltstaat*, 2001, p. 125 et seq. with 235 et seq.; Köck, EurUP 2024, 1, 6 et seq.; Köck, in: Köck/ Markus/ Reese (eds.) *Zukünftiges Umweltrecht I*, 2023, p. 9 (16 et seq.); Henn et al, NuR 2024, 234 et seq.; Spranger, EurUP 2023, 274 (277)).

The need for an effective and coherent legal protection concept that includes integrated goals and targets for the individual fields of action, takes into account the drivers of biodiversity loss and has effective governance structures in order to fairly distribute the considerable burden of halting biodiversity loss and restoring it to the required extent over time is therefore essential in order to accomplish the complex task of biodiversity protection, which affects a large number of fields of action. The federal strategies for biodiversity conservation described above cannot replace this. They have no binding legal form and consist only of non-binding and, moreover, constantly missed targets and declarations of intent. The legislator has so far failed to take the key decisions itself.

C. Situation of the complainants

..... (see German version of the constitutional complaint)

.....

Part 2 - Legal assessment

A. Admissibility of the constitutional complaint

The constitutional complaint is admissible. (see German version of the constitutional complaint)

B. Justification

The admissible constitutional complaint is also well-founded.

According to the complainants, their fundamental rights are being violated because the Bundestag and Bundesrat

1. **have not adopted sufficient regulations to ensure the conservation of biodiversity to the extent necessary to protect liberty, life, health and the preservation of natural resources for future generations .**
2. **It is therefore necessary to order the Bundestag and the Bundesrat to regulate a comprehensive legal protection concept for the preservation of biodiversity in accordance with the grounds of the judgment within a period to be determined by the Federal Constitutional Court.**

From a legal perspective, we explain below that the lack of a comprehensive legal protection concept violates both fundamental rights and the required intertemporal safeguarding of freedom.

I. **Violation of the fundamental rights protection dimension due to the lack of a comprehensive protection concept for biodiversity**

It is explained below that the guarantee of protection under Art. 2 para. 2 sentence 1 GG is violated by the lack of a comprehensive statutory protection concept for the conservation of biodiversity (also for biodiversity Köck, EurUP 2024, 1 et seq.; Calliess, ZUR 2024, 65; Henn et al, NuR 2024, 234 et seq.).

1. **Violation of the fundamental right to protection under Art. 2 para. 2 sentence 1 GG**

a **Obligation to protect under Art. 2 para. 2 sentence 1 GG**

The state is obliged by the fundamental right to the protection of life and health in Art. 2 para. 2 sentence 1 GG to protect against the dangers of biodiversity loss . It

must counter the considerable risk potential of the rapid loss of biodiversity for human health through measures that contribute to stopping further deterioration through international involvement. Measures are also required as part of a comprehensive conservation concept to ensure the restoration of biodiversity.

aa) Fundamental right to protection under Art. 2 para. 2 sentence 1 GG

The right to life and physical integrity is enshrined in Art. 2 para. 2 sentence 1 GG. This fundamental right has a special status (BVerfG, Chamber decision of August 11, 1999 - 1 BvR 2181/98 -, para. 67, juris; BeckOK GG/Lang, 57th ed. 15.1.2024, GG Art. 2 para. 162), because although it is subject to a legal reservation and thus to a balancing with other fundamental rights guarantees, for example, it also marks the elementary prerequisite of any freedom. This underlines the special weight of this right in its defensive as well as its protective dimension. With regard to the content of the protective dimension of Art. 2 para. 2 sentence 1 GG, the Senate stated the following in the context of the climate decision (BVerfGE 157, 30, para. 145 et seq.):

"Art. 2 para. 2 sentence 1 GG contains a general state duty to protect life and physical integrity. The fundamental right protects not only as a subjective right of defense against state interference. It also includes the state's duty to protect and promote the legal interests of life and physical integrity and to protect them from unlawful interference by others (see BVerfGE 142, 313 <337 para. 69> with further references; established case law). The duties to protect derived from the objective function of the fundamental right are fundamentally part of the subjective entitlement to the fundamental right. If duties to protect are violated, this also constitutes a violation of the fundamental right under Art. 2 para. 2 sentence 1 GG, against which those affected can defend themselves by means of a constitutional complaint (see BVerfGE 77, 170 <214>; established case law).

The state's duty to protect under Art. 2 para. 2 sentence 1 GG does not only intervene when injuries have already occurred, but is also directed towards the future (cf. BVerfGE 49, 89 <140 et seq.>; 53, 30 <57>; 56, 54 <78>; 121, 317 <356>). The duty to protect against risks to life and health can also give rise to an obligation to protect future generations (see H. Hofmann, ZRP 1986, 87 <88>; Appel, Staatliche Zukunfts- und Entwicklungsvorsorge, 2005, p. 116 et seq. with further references; Kleiber, Der grundrechtliche Schutz künftiger Generationen, 2014, p. 283 et seq.; Murswiek/Rixen, in: Sachs, GG, 8th ed. 2018, Art. 2 para. 202). This applies all the more when irreversible developments are at issue. However, this intergenerational obligation to protect is solely of an objective legal nature, because future generations are not currently capable of fundamental rights either in their entirety or as the sum of the individual people living in the future (see para. 109 above; cf. Calliess, Rechtsstaat und Umweltstaat, 2001, p. 119 et seq.; Gärditz, in: Landmann/Rohmer, Umweltrecht, 93rd ed. August 2020, Art. 20a GG para. 95). ...

The protection of life and physical integrity pursuant to Art. 2 para. 2 sentence 1 GG includes the protection against impairments and in particular against damage to fundamental rights protected by environmental pollution, regardless of who causes it and under what circumstances (cf. BVerfGE 49, 89 <140 et seq.>; case law; Sparwasser/Engel/Voßkuhle, Umweltrecht, 5th ed. 2003, p. 51 et seq.)."

The Senate went on to state that the guarantee of protection resulting from Art. 2 para. 2 sentence 1 of the Basic Law also includes the obligation to protect life and health from environmental hazards such as climate change, and referred to the threats posed by heat waves, floods and hurricanes. The state has an obligation both to people living today and to future generations.

bb) Requirements under the ECHR

In the context of determining the content of the obligations arising from Art. 2 para. 2 sentence 1 GG, the Senate also referred to the case law of the ECtHR in the climate decision and found that the ECHR also imposes a positive obligation on the state to protect against environmental damage that endangers life and health (BVerfGE 157, 30, para. 147). The ECtHR has now also established that states have a positive obligation under Art. 2, 8 ECHR to implement sufficient measures to combat climate change in order to protect private and family life from its serious negative effects - based on the fact that in European international law, Art. 8 ECHR is used by the ECtHR as the basis for the fundamental right to protect health from environmental hazards. In this context, it is the primary duty of the state to enact and effectively apply in practice regulations and measures that are capable of mitigating the existing and potentially irreversible future effects of climate change (ECtHR, judgment of 09.04.2024, ref. 53600/20).

In the following, we explain that the statements made by both the Senate and the ECtHR with regard to the dangers of climate change must also be applied to the threat to fundamental rights posed by the loss of biodiversity.

cc) Activation of the biodiversity-related duty to protect

The right to life and health also includes the obligation to protect life and health from the dangers of biodiversity loss (Lähteenmäki-Uutela/ Ituarte-Lima/ Turunen/ Ott/ Lonkila/ Haukioja, Planetary Boundaries Nurturing the Grand Narrative of the Right to a Healthy Environment? Environmental Policy and Law 2024, 15 et seq.; Köck, EurUP 2024, 1 (6 et seq.); Calliess, ZUR 2024, 65; Henn et al, NuR 2024, 234 et seq.). Ultimately, the decisive factor is that as biodiversity loss increases, so do the consequences for humans. The loss of ecosystem functions and ecosystem services leads to an increasing impairment of the freedom guaranteed by fundamental rights and its prerequisites. In view of this, the state has an obligation to act both towards people living today and towards future generations. It has already been established and explained in detail in the facts of the case (Part 1 A. I.) that the loss of biodiversity leads to a loss of ecosystem services such as pollination, natural plant protection, soil fertility, water recharge and oxygen production, which form the basis for food production, human well-being, economic activity and survival. Biodiversity loss therefore has serious consequences for human life and thus also for fundamental rights, as it has a negative impact on the stability and continuity of ecosystems and on the provision of goods and services on which humanity depends.

In view of the current state of biodiversity in Germany, the fundamental constitutional

right to protection is already activated - the impairment of the protected good is therefore already present. This also applies if one assumes that not every loss of diversity may lead to an activation of Art. 2 para. 2 sentence 1 GG - as well as Art. 2, 8 ECHR. In any case, an impact must be assumed if the loss of biodiversity has reached such an extent that significant negative effects on ecosystem functions and ecosystem services are caused and are to be expected in the future (see Köck, Eu-rUP 2024, 1 (7), Henn et al, NuR 2024, 234 (235 et seq.)), because then there is also a threat to the legal interests protected in Art. 2 para. 2 sentence 1 GG. Irrespective of whether the level of biodiversity to be safeguarded is specifically defined under constitutional law, it is evident that unchecked loss activates the constitutional obligation to protect. This applies all the more in view of losses that have a significant impact on basic ecosystem functions and ecosystem services, as described above. This is because the loss of biodiversity - as explained above - will not only cause damage in the future, but is already causing damage today, as the ecosystem degradation processes described are already in full swing, and to an extent that is considered by experts to be a flagrant transgression of planetary boundaries. At the same time, the processes of restoration are extremely lengthy and require long periods of time, which, in addition to the threat of serious damage, makes immediate action all the more urgent. In view of this negative assessment of the current state of ecosystems, the loss of healthy food, clean air and clean water, as well as the increase in zoonoses and pandemics, is already foreseeable, so that the fundamental right to protection under Article 2 (2) sentence 1 of the Basic Law is clearly affected.

However, in accordance with the climate resolution, the activation of the state's obligation to protect does not only include protection against dangers, but also precautionary protection of fundamental rights. In this respect, the state must ensure that dangers to life and health are avoided and that dangers that have nevertheless occurred are combated. A precautionary approach to the protection of fundamental rights requires that the most recent and at the same time rather cautious, pessimistic scientific forecasts on the loss of biodiversity be taken as a starting point, especially if the severity of the impending damage is taken into account. Even knowledge deficits cannot justify the omission of protective measures if the threat situation is recognized as such. Even if, as is always the case with fundamental rights, the state's scope for action must be recognized at the barrier level, this does not result in a "freedom to do nothing" (see Sachs/Rixen, GG, 9th ed. 2021, Art. 2 para. 200). The duty to act under Art. 2 para. 2 sentence 1 GG thus applies regardless of the fact that biodiversity is a complex protected good for which individual scientific uncertainties remain (Henn et al, NuR 2024, 234 (236)).

It cannot be argued against this that a comprehensive protection concept for the protection of biodiversity could still be enshrined in law at a later date. In any case, purely hypothetical future situations cannot be decisive for the assessment of the conformity of state action with fundamental rights. In addition, as explained above (Part 1 A. I. 5.), the loss of biodiversity is becoming increasingly irreversible and subsequent legislative action therefore threatens to be ineffective or at least significantly less effective. The BVerfG stated in the climate decision (BVerfG 157, 30, para. 21):

"So-called tipping point processes (...) are seen as a particular threat to ecological stability because they can have far-reaching environmental impacts. (...)"

Such irreversibilities or tipping points also threaten biodiversity, as has already been explained (see Part 1 A. I. 5.), which applies in particular to extinct species and destroyed habitats. In addition, if the Senate has already classified the level of ambition in climate protection as insufficient (BVerfGE 157, 30), although the situation with biodiversity loss is much more dramatic (see Part 1 A. I. 5. above), it is even more obvious to recognize a need for further legislative action in the case of biodiversity loss.

dd Strengthening the biodiversity-related protection of fundamental rights through an interpretation that is friendly to international law and oriented towards the protection of fundamental climate rights

The obligation to protect against the loss of biodiversity under Art. 2 para. 2 sentence 1 GG is additionally reinforced by an interpretation that is friendly to international law on the basis of international biodiversity and climate law - and by taking into account the interdependence of climate change and biodiversity loss (Part 1 A. I. 3.) in the interpretation of fundamental rights:

Firstly, a guarantee of protection for biodiversity also arises indirectly from climate protection under fundamental rights, as has already been made clear with regard to the right of appeal. As explained above, climate change and biodiversity loss or climate and biodiversity protection are mutually reinforcing. For example, the protection of ecosystems and biodiversity is directly linked to the protection of the global climate. Forests and peatlands are both biodiversity hotspots and greenhouse gas sinks for negative emissions and can simultaneously enable adaptation measures to climate change. Land use changes are successively and massively reducing the carbon storage potential of these sinks as well as biodiversity. This means that fundamental climate protection also obliges us to protect biodiversity, because without the sequestration of emissions, especially in peatlands and forests, the necessary climate neutrality cannot be achieved even with zero fossil fuels and a sharp reduction in animal husbandry (see in each case m.Rodriguez-Garavito/ Boyd, Transnational Environmental Law 2023, 498 et seq.; Henn/ von Vittorelli/ Seppelt 2024; Glinski, EJCL 2023, 416 et seq.; Ekardt/ Günther/ Hagemann/ Garske/ Heyl/ Weyland, Environmental Sciences Europe 2023, 80; Ekardt/ Jacobs/ Stubenrauch/ Garske, Land 2020, 83; Stubenrauch et al, Forest Governance, 2022; Günther/ Ekardt, Frontiers in Climate 2023, 10.3389). However, since both Art. 2 para. 2 sentence 1 GG and the requirement to safeguard intertemporal freedoms from Art. 2 para. 1 in conjunction with Art. 20a GG are a requirement. Art. 20a GG contain a requirement of climate neutrality, inadequate biodiversity protection also results in an impairment of these fundamental rights guarantees. This is to be cited here as reinforcing the original protection against the loss of biodiversity from Art. 2 para. 2 sentence 1 GG - and underlines in the form of the threat of undermining climate neutrality that there is an impairment of fundamental rights here.

Secondly, it has already been made clear that there is a requirement under international environmental law to halt the loss of biodiversity in accordance with Art. 1 CBD. It has already been explained that this requirement has been legally binding since 1993 and has been violated since then (see Part 1 A. II. above).

Thirdly, there is an indirect requirement to conserve biodiversity from international climate law and its 1.5 degree limit in Art. 2 para. 1 PA. These international environmental law objectives from Art. 2 PA as well as from Art. 1 CBD are based on broad scientific expertise, which is bundled at UN level at the IPCC and the IPBES, as already stated in the Climate Decision (BVerfGE 157, 30). In each case, this is based on the realization that human existence would not be possible in the long term without a stable climate and intact ecosystems. By way of an interpretation that is friendly to international law, this underlines the fact that the fundamental right under Art. 2 para. 2 sentence 1 GG must be interpreted in such a way that it also contains this guarantee - which must then be regarded as impaired if biodiversity loss has been unchecked for decades. The relationship between fundamental rights and international environmental law in the case of biodiversity loss can thus be construed in accordance with the principles of climate protection: Human rights set a similar level of entitlement as international environmental law - a temperature limit of well below 2 or 1.5 degrees Celsius on the one hand and a preservation of biodiversity on the other (the link between the intertemporal safeguarding of freedom and Article 20a of the Basic Law can underline this again; see below Part 2 B. II. 1. BELOW).

b Violation of the obligation to protect fundamental rights

Art. 2 para. 2 sentence 1 GG is violated because the legislator has not made sufficient provisions to preserve biodiversity in the form of a comprehensive protection concept, insofar as this is necessary to protect freedom, life, health and the preservation of the natural foundations of life for future generations.

aa Constitutional requirements

In order to achieve an intensive, comprehensive and functioning protection of fundamental rights for the holders of fundamental rights, the state is materially obliged, on the one hand, to refrain from its own unjustified encroachments on the constitutionally protected interests of the legal entities and, on the other hand, as a direct equivalent to this obligation of the state, to prohibit by law violations of constitutionally protected interests by third parties that cannot be justified under constitutional law and to enforce this effectively (BVerfGE 79, 174 (202); 88, 203; 157, 30; Klein, DVBl 1994, 489 (491)).

As is always the case with infringements of fundamental rights, the legislator has a wide scope of discretion with regard to the fulfillment of the duty to protect or the right to protection explicated therein, so that legislation, in addition to formal constitutional requirements such as the parliamentary reservation, can essentially be reviewed according to previous case law as to whether it has exceeded the limits of

consideration, as is commonly reflected in particular by the principle of proportionality. In other words, the scope for action is limited where certain measures and actions are absolutely necessary to protect the protected good (Murswiek/ Rixen, in: Sachs (ed.), Grundgesetz Kommentar, 7th ed. 2014, Art. 2 para. 30; Calliess, Rechtsstaat und Umweltstaat, 2001).

The limit above which the state is obliged to act can be defined in abstract terms with the concept of the prohibition of inadequacy or of adequate and effective protection (BeckOK GG/Lang, 57th ed. 15.1.2024, GG Art. 2 para. 255 with reference to BVerfGE 88, 203 (254 et seq.); BVerfGE 157, 30). According to case law, the prohibition of inadequate measures is violated if the legislature remains completely inactive or clearly does too little to protect (BVerfGE 46, 160 (164 et seq.); Alexy, Theorie der Grundrechte, 1986, p. 420 et seq.), i.e. if the public authority takes precautions to protect the fundamental right that are completely unsuitable or completely inadequate (BVerfGE 77, 170 (215); BVerfGE 79, 174 (202); BVerfGE 85, 191 (212 et seq.); BVerfG, NJW 2017, 53, para. 70). Precisely such obviously unsuitable precautions on the part of German legislation can be found in the case of biodiversity loss.

With regard to the requirements for a violation of the obligations resulting from Art. 2 para. 2 sentence 1 GG, the Senate stated the following in the climate decision (BVerfGE 157, 30, para. 152):

"Whether sufficient measures have been taken to fulfill fundamental rights protection obligations can only be reviewed by the constitutional court to a limited extent (see BVerfGE 77, 170 <214 et seq.>; 79, 174 <202>; established case law). (...) The decision as to how dangers are to be counteracted, the establishment of a protection concept and its normative implementation are a matter for the legislature, which in principle also has a scope for assessment, evaluation and design if it is obliged on the merits to take measures to protect a legal interest (cf. BVerfGE 96, 56 <64>; 121, 317 <356>; 133, 59 <76 para. 45>; 142, 313 <337 para. 70>; established case law). Thus, if a duty to protect exists on the merits, the question of the effectiveness of state protective measures is not outside the scope of constitutional court review. The Federal Constitutional Court determines that a duty to protect has been breached if protective measures have either not been taken at all, if the regulations and measures taken are

are obviously unsuitable or completely inadequate to achieve the required protection objective, or if they fall considerably short of the protection objective (see BVerfGE 142, 313 <337 et seq. para. 70> with further references; established case law)."

In the following, we explain that this is the case for the object of the complaint of biodiversity loss asserted here (also Köck, EurUP 2024, 1 (6 et seq.); Calliess, ZUR 2024, 65; Henn et al, NuR 2024, 234 et seq. for the necessity of a comprehensive protection concept or guiding law for biodiversity protection).

bb Interpretation on the basis of the ECHR

In addition to the constitutional limit of the prohibition of insufficient measures just described in the established case law of the Federal Constitutional Court, above which the state is obliged to act, the ECtHR also formulated a list of tests for assessing whether a state has remained within its discretionary powers in its judgment of 09.04.2024 Ref. 53600/20. In our view, this cascade of tests is not only applicable in the context of climate protection, but also represents a concretization of the general requirements of Art. 2 para. 2 sentence 1 GG and Art. 2, 8 ECHR in order to be able to subject the limits of the state's discretionary powers or the material limits of the balancing of interests to judicial review. The ECtHR mentions the following points:

"[The court will examine] whether the competent national authorities, whether at legislative, executive or judicial level, have taken due account of the need:

(a) adopt general measures that set a timeline for achieving carbon neutrality and the total remaining carbon budget for the same period, or another equivalent method for quantifying future GHG emissions, in line with the overarching goal for national and/or global climate change mitigation commitments;

(b) Establish interim targets and pathways to reduce GHG emissions (by sector or other relevant methodologies) that are considered capable, in principle, of achieving the overall national GHG reduction targets within the relevant timeframes adopted in national policies;

(c) Provide evidence of whether they have properly met or are in the process of meeting the relevant GHG reduction targets (see subparagraphs (a)-(b) above);

(d) keep the relevant GHG reduction targets up to date with due diligence and based on the best available evidence; and

(e) act in a timely, appropriate and consistent manner in the development and implementation of relevant legislation and policies."

Based on this, the following general requirements can be derived, which can be used to determine whether the human rights obligation to protect has been adequately fulfilled, particularly in the environmental area:

- Determining a target in line with national and/or international obligations and setting a timeframe for achieving the target;

- Definition of interim targets that are fundamentally suitable for achieving the target within the defined period;
- Implementation of a governance structure to ensure target achievement (= provision of evidence as to whether the target and interim targets are being properly met);
- Ensuring that targets are updated on the basis of the best scientific knowledge, i.e. the factual situation;
- Ensuring the development and implementation of relevant legislation and executive measures.

In terms of the interpretation of the Basic Law in line with international law, the aforementioned statements of the ECtHR from the judgment of 09.04.2024, Ref. 53600/20 must be observed in accordance with the established case law of the Senate when examining the violation of property rights under Art. 2 para. 2 sentence 1 of the Basic Law (BVerfGE 128, 326, para. 86):

"The European Convention on Human Rights has the status of a federal law in Germany and is therefore subordinate to the Basic Law (a). However, it must be used as an aid to interpretation when interpreting the fundamental rights and constitutional principles of the Basic Law (b). This also applies to the interpretation of the European Convention on Human Rights by the European Court of Human Rights (c). This constitutional significance of the European Convention on Human Rights and thus also of the case law of the European Court of Human Rights is based on the Basic Law's friendliness towards international law and its substantive focus on human rights (d). However, its use as an aid to interpretation does not require a schematic parallelization of the statements of the Basic Law with those of the European Convention on Human Rights, but rather an incorporation of the values of the European Convention on Human Rights (e), insofar as this is methodologically justifiable and compatible with the requirements of the Basic Law (f)."

The standards of the ECtHR must therefore be taken into account when examining the violation of the duty to protect. In the case of climate protection, the ECtHR has linked the guarantee of protection to the 1.5 degree limit. This corresponds to what was stated above regarding Art. 1 CBD and the halting of biodiversity loss, in that it links the protection of life and health with an internationally legally binding environmental goal by way of an interpretation that is friendly to international environmental law. This also underlines the indirect obligation to protect biodiversity on the basis of an ambitious climate protection commitment. **It should be particularly emphasized that the ECtHR requires a comprehensive and quantifiable protection concept in the course of the environment-related Art. 8 ECHR, as was made clear in the above list.** The ECtHR's consideration - which is transferable to biodiversity protection - that intertemporal freedom or intergenerational justice is notoriously underrepresented in democratic decision-making interests and that this speaks in favor of limiting the democratic scope of action (see also Meßerschmidt, Gesetzgebungsermessens, 2000 and Ekardt, Theorie der Nachhaltigkeit, 4th ed. = 3rd ed. of the new edition 2021, § 5 B.).

cc) Subsumption

Based on the requirements of the Senate and the ECtHR just cited, there is a violation of the duty to protect or the right to protection under Art. 2 para. 2 sentence 1 GG due to the state's inaction in the matter of biodiversity conservation.

(1) Complete inactivity of the legislator

Even according to its own assessment (see Part 1 B. above), legislation has not yet been able to stop the loss of biodiversity and has not standardized a comprehensive legal protection concept for the conservation of biodiversity. Although, as shown, the minimum requirements of biodiversity protection can be concretized from the perspective of the constitutional protection obligations to the effect that a halt to the loss of biodiversity and at the same time a restoration of losses that have already occurred is required, there has so far been a lack of a target and governance structure comparable to climate protection and a lack of addressing the drivers of destruction in relation to the protection of biodiversity (cf. Köck, EurUP 2024, 1, (5)).

Based on the ECtHR's examination sequence, a target should first have been set by law in accordance with the requirements of international law, which is in line with the level of protection under fundamental rights and international obligations (see below). A time period or target year should also have been set for achieving this target. Furthermore, a governance structure needs to be implemented, which is characterized in particular by smaller interim targets as well as instruments for reviewing and monitoring the achievement of targets. Finally, the state must also ensure that the legislative and executive measures required to achieve the targets on time are actually drawn up and implemented. Each of the points mentioned must also be based on the latest reliable scientific findings as a factual basis.

In view of this, the introduction of a guiding law or a comprehensive legal protection concept for the conservation of biodiversity is the minimum measure to be able to fulfill the state's obligation to protect under Art. 2 para. 2 sentence 1 GG (or Art. 2 and 8 ECHR). Based on Art. 1 CBD, this must actually be geared towards the conservation of biodiversity and the fact that this goal, which has been required under international law for 30 years, has not been achieved for a long time. At the same time, the facts point to the dramatic nature of the problem (even more so than climate change), which is why the restoration of biodiversity must be tackled alongside the immediate halt to the loss of biodiversity. After all, if the planetary boundaries for biodiversity loss have already been exceeded, it cannot be enough to stop species extinction in the future to preserve biodiversity. Here, too, the legislator has a scope for consideration and design, but this must be exercised in such a way that long-term protection of life and health can actually be guaranteed.

The legislator's omission with regard to the preservation of biodiversity therefore undermines the constitutional obligation to protect and promote the legal interests of life and physical integrity of the complainants, so that there is an impairment of the constitutional mandate under Art. 2 para. 2 GG - and, moreover, under Art. 20a GG (see Part 2 B. II. 1. below) - and thus a violation of the fundamental right to physical integrity and life. **The fact that the legislator has not yet legislated a comprehensive protection concept to achieve this gives the omission, as mentioned, an extent that goes beyond the omission in climate protection. The legislative omission has the same character as if the legislator did not even strive for climate neutrality as a goal - as has been cited elsewhere (by BVerfGE 157, 30, para. 157) as an example of not only an impairment, but an evident violation of the fundamental rights protection dimension. This is therefore the case here.**

An even stricter standard of review in favor of (also) biodiversity can be achieved by taking into account the fact that the Basic Law defines the defensive and protective dimensions in Art. 1 para. 1 sentence 2 GG ("respect ... protect", which applies to all fundamental rights because dignity and thus also its structure is the basis of all subsequent guarantees of freedom according to Art. 1 para. 2 GG) and in Art. 2 para. 1 GG ("free development ... rights of others") as equally important. For this reason, there is no basis for a diminishing view of the fundamental rights of protection vis-à-vis the rights of defense in a grammatical and systematic interpretation of the constitution that extends the legislature's scope of action very far (Calliess, Rechtsstaat und Umweltstaat, 2001; Koch, Der Grundrechtsschutz des Drittbetroffenen, 2000, p. 503; Vosgerau, AöR 2008, 346 et seq.; Ekardt, Theorie der Nachhaltigkeit, 4th ed. = 3rd ed. of the new edition 2021, § 4 E.; see also Cremer, Freiheitsgrundrechte, 2003; Borowski, Grundrechte als Prinzipien, 3rd ed. 2018). Contrary to a widespread misunderstanding, protective remedies such as the present one are also not (!) aimed at obliging the legislature to take precisely one specific policy measure. Rather, as with defense actions, the sole aim (as argued by the complainants) can be to draw an external boundary through a judicial determination - without specifying in detail which legislative control instruments are then to be used. Protection cases are therefore not aimed at something categorically different from defense cases, and therefore do not per se create a greater scope for action: The fact that a constitutional court may almost never restrict a parliament to a single option for action, but is only authorized to indicate which actions are in any case inadmissible or insufficient on the basis of constitutional external (formal or substantive) limits to the legislature's scope for action, is rather equally plausible for both categories of cases for reasons of separation of powers.

In addition, this is underlined because it is questionable whether the defensive and protective dimensions of fundamental rights can be clearly separated at all, firstly in general and secondly in the case of biodiversity protection, where the legislative omission could also be interpreted as an active impairment of biodiversity and therefore as a case of the defensive dimension: For example, the granting of subsidies by the state that damage biodiversity or the approval

of various construction measures, etc. can also be understood as an active encroachment on the defensive dimension of fundamental rights (especially to life and health) instead of a failure by the state to protect biodiversity. Moreover, a premature affirmation of the alleged existence of a separation of powers problem would trigger a contradiction of values in that the ECB ruling of the BVerfG, in line with established case law (BVerfG, judgment of 05.05.2020, 2 BvR 859/15 et al), literally every single German citizen is given the opportunity to trigger a review of fundamental pillars (not only of German, but also of European economic policy) by invoking Article 38 (1) of the Basic Law. This recent ruling makes it clear that the court considers it conceivable that a BVerfG ruling could set a significant course.

If one recognizes the categorical and hierarchical equivalence of the fundamental rights defence and protection dimensions, it becomes even more obvious that the examination of the constitutional justification of the protection dimension should be based on the same proportionality as the defence dimension. The consequence would be that a violation of the constitution would not only have to be affirmed in the case of a complete lack of or completely inadequate protection - which is already the case here (see above) - but also in the case of other weighing errors or violations of the individual stages of the proportionality test (Groß, JZ 2024, 893 et seq.; Calliess, Rechtsstaat und Umweltstaat, 2001; Koch, Der Grundrechtsschutz des Drittbetroffenen, 2000, p. 503; Ekardt, Theorie der Nachhaltigkeit, 4th ed. = 3rd ed. of the new edition 2021, §§ 4 E., 5 C.). In addition to the previous explanations on the violation of the protection dimension (see Part 2 B. I. 1. above), the following then also arises: The substantive rules for balancing conflicting spheres of freedom require, for example at the last stage of the proportionality test, that trade-offs between different conflicting rights of freedom are not obviously resolved unilaterally. However, this is precisely the case when the loss of biodiversity has been allowed to continue unchecked for decades in order to avoid significant political restrictions on economic activity and consumption. As a further concretization of the appropriateness level of the proportionality test, it is obvious that the political scope for decision-making ends where political action or inaction endangers the free democratic basic order as such. This is precisely the effect that an unregulated loss of biodiversity can have due to its dramatic consequences, which can take on an irreversible momentum of their own.

All of this applies all the more if one takes into account the fact that the consequences of the loss of biodiversity, as a global phenomenon for which Germany is partly responsible, also represent a problem for future people and for people beyond Germany's national borders - and possibly an even greater problem. In case law and literature, human rights in relation to the environment are also ascribed an intertemporal and global, cross-border effect (ultimately also tend to be recognized in BVerfGE 157, 30). This is the result of an interpretation of the term "everyone" in Art. 2 para. 2 sentence 1 GG and ultimately all other fundamental rights (Unnerstall, Rechte zukünftiger Generationen, 1999). The most important argument in favor of an intertemporal and global understanding of "everyone" is that freedom should be effective wherever it is

threatened - and today, unlike centuries ago, this threat often extends over great distances and periods of time. This aspect is just as relevant for the protection of biodiversity as it is for climate protection. Moreover, in view of our lifestyle, Germany has so far claimed a disproportionate share of global biodiversity on a per capita basis (which, if interpreted in accordance with international law, is suggested by Art. 3 para. 1 UNFCCC and Art. 4 PA); Germany therefore owes above-average efforts rather than average ones.

(2) No fulfillment of the duty to protect through international obligations

The result just reached is not affected by existing obligations under international law that the Federal Republic of Germany has entered into. Although these can provide the starting point for the implementation of corresponding regulations and orientation for the individual fields of action (see below), they do not fulfill the protection mandate contained in Art. 2 para. 2 sentence 1 GG. This is all the more true as the interpretation of the right to life and health in accordance with international law on the basis of Art. 1 CBD has just shown that the preservation of biodiversity is imperative. The fact that this requirement has been legally binding since 1993 and has been violated since then has already been explained (see Part 1 A. II. above). At the same point, it has already been explained that the GBF attempts to bring the objective of Art. 1 CBD, which has been unlawfully violated since 1993, closer to implementation, but may not deviate from the content of Art. 1 CBD and, moreover, does not itself constitute a legally binding document. The Kunming-Montreal GBF defines, similar to earlier non-legally binding documents under the CBD such as the Aichi Targets (which should have been met by 2020 and were missed), a vision for 2050 with four long-term goals A-D, a mission for 2030 with milestones necessary for their realization:

- "1) Planning and management of all areas to reduce biodiversity loss*
- 2) Restoration of 30% of all degraded ecosystems*
- 3) Protection of 30 % of the land and water area*
- 4) Stopping species extinction, protecting genetic diversity and managing conflicts between humans and wildlife*
- 5) Ensure the sustainable, safe and legal harvesting and trade of wild species*
- 6) Reduce the introduction of invasive alien species by 50% and minimize their impact*
- 7) Reduction of pollution to a level that is not harmful to biodiversity*
- 8) Minimizing the impact of climate change on biodiversity and building resilience"*

These more specific targets initially show the individual fields of action in which action is required in order to achieve the overall goal of halting the loss of biodiversity and restoring biodiversity. However, such non-binding requirements, which also violate Art. 1 CBD, do not provide a comprehensive concept and postpone the long-needed conservation of biodiversity into the future, cannot be regarded as fulfilling the fundamental obligation to protect under Art. 2 para. 2 sentence 1 GG. The legal protection concept would therefore also be necessary for reasons of bindingness, concretization and acceleration of the GBF approaches.

- (3) Insufficient level of protection even if individual regulations in special law are taken into account

As a precautionary measure, it is also pointed out that the individual regulations under special law do not in themselves constitute a comprehensive protection concept. This has already been described accordingly in the facts of the case. The German strategies proved not to be legally binding and the technical regulations proved to be manifestly inadequate for the conservation of biodiversity (see Part 1 B.). This already follows from the fact that the respondents themselves assume that the loss of biodiversity is continuing and that it has therefore not been possible to stop the extinction of species with the existing control instruments, as the respondents themselves admit (see Part 1 B. I. above) - especially as some of the special legislation is explicitly designed to be harmful to biodiversity (see Part 1 B. II. above).

In addition, none of the sectoral laws explicitly enshrine the conservation of biodiversity, the halting of its loss and the need for its restoration as a legally binding goal and ensure the achievement of this goal with concrete measures. Thus, there is a lack of overarching measures and provisions that focus on the protection of biodiversity (as a whole). As has been shown (in Part 1 B. II. 4.), the Nature Restoration Law of 2024 does not change any of this. In the above detailed explanations, it proved to be too generous in its time horizon; too unclear with regard to the success owed; too rich in exceptions; too incomplete in its scope of application, for example with regard to the drivers of biodiversity loss; too lax with regard to the lack of strict monitoring of progress in the conservation of biodiversity. Due to the lack of concretization for Germany and the unplanned German implementation law, the continuing absence of a comprehensive legal protection concept is also becoming more evident. In addition, the examination of the Nature Restoration Law has shown that the history of environmental targets based on EU law does not indicate that the corresponding targets - which in this case are still inadequate - will actually be achieved.

In order to stop the loss of biodiversity, a transformation of many areas of life and the economy is necessary within a short period of time, so that the legislator has a duty to initiate the necessary development and implementation processes as early and transparently as possible and to provide a sufficient

degree of planning security and development pressure (the fact that the Senate demands this in detail with regard to the intertemporal safeguarding of freedom is explained in detail in Part 2 B. II. in the light of BVerfGE 157, 30). However, this can only be made possible by means of a comprehensive legal protection concept, as there are various causal connections between the different direct and indirect drivers of biodiversity loss and correspondingly different areas of society are affected, as explained in the facts of the case (see Part 1 A. I. 1.-3.). In this respect, the legislator must ensure the long-term development of a biodiversity-friendly way of life and economy through a corresponding transformation process in society, for the initiation of which the legislator must create a suitable framework.

The establishment and implementation of a comprehensive conservation concept would not be impossible either. As far as the control instruments to be designed therein are concerned, much could be achieved, similar to climate protection, if typical drivers of the destruction of (also) biodiversity, such as livestock farming, fossil fuels and pesticides, were subjected to a quantity control such as cap-and-trade systems - however, these would have to be designed more ambitiously than has been done in the past, for example with the EU ETS, in order to comply with Art. 1 CBD and Art. 2 PA as well as the parallel fundamental rights protection standards (for more details, see Weishaupt et al, Sustainability 2020, 2053; Ekardt/ Günther/ Hagemann/ Garske/ Heyl/ Weyland, Environmental Sciences Europe 2023, 80; Ekardt/ Bärenwaldt, Sustainability 2023, 12993; Ekardt/ Heß/ Bärenwaldt/ Hörtzsch/ Wöhlert, Judiciary as a driver of climate protection? Bedeutung und Auswirkungen der Klimaklagen, UBA-Texte, 2023; if, on the other hand, cap-and-trade systems were established directly for biodiversity, the heterogeneity of biodiversity would result in a mapping problem; see Günther et al, Environmental Sciences Europe 2024, 72).

According to all of the above, the legislator has no constitutional justification for the impairment of the obligation to protect under Art. 2 para. 2 sentence 1 GG. The legislator's omission also violates (see below) the biodiversity protection requirement of Art. 20a GG. The violation of Art. 2 para. 2 sentence 1 GG caused by the legislator's omission is also incompatible with objective constitutional law, as will be explained in more detail in connection with the intertemporal safeguarding of freedom. With all of this in mind, the constitutional complaint is already justified because the federal legislature has only taken manifestly inadequate measures under substantive law to prevent the impending violations of fundamental rights described above, although the scientific community agrees that the loss of biodiversity can only be effectively combated within the framework of a comprehensive legal protection concept.

2. Violation of the obligation to protect under Art. 14 para. 1 GG

a Obligation to protect

The fundamental right to property in Art. 14 para. 1 GG also includes a state obligation to protect (cf. BVerfG 114, 1 (56)). As a result of the loss of biodiversity, in particular agricultural land and real estate of the BF re 7 and 8 can be damaged in different ways, so that Art. 14 para. 1 GG includes an obligation of the state to protect property with regard to the property risks of the loss of biodiversity. In this respect, reference is made to the explanations regarding the right of appeal of the complainants 7 and 8.

b Injury

Article 14(1) of the Basic Law is violated because the legislator has not made any provisions to ensure the conservation of biodiversity within the framework of a comprehensive legal protection concept, insofar as this is necessary to protect property.

In view of the legislator's leeway in fulfilling guarantees of protection of fundamental rights, a violation of the constitution - as just explained in detail with regard to Art. 2 para. 2 GG has just been explained in detail - according to established case law, a violation of the constitution only exists if protective measures are either not taken at all, if the regulations and measures taken are obviously unsuitable or completely inadequate to achieve the required protection objective, or if they fall considerably short of the protection objective (BVerfGE 157, 30, para. 171; BVerfGE 142, 313 <337 et seq. para. 70> with further references). However, this is the case for the object of the complaint of biodiversity loss asserted here, and not only for Art. 2 para. 2 sentence 1 GG as seen, but also for Art. 14 para. 1 sentence 1 GG (cf. also Part 2 B. I. 1.b.).

This is because the legislature - despite individual approaches under special law - has not enshrined a comprehensive protection concept for the conservation of biodiversity in law, even according to its own assessment (see Part 1 B. above). This omission on the part of the legislature thus undermines the constitutional obligation to protect and promote the legal interest of the property of the complainants 7 and 8, so that there is an impairment of the constitutional mandate under Art. 14 para. 1 GG and thus a violation of the constitutional guarantee of property (as well as Part 2 B. I. 1. b. above). In order to avoid repetition, reference is made to the explanations regarding the degree of impairment of property in the facts of the case and the right of appeal, in particular to the fact that in the event of an unhindered loss of biodiversity, agriculture will only be possible in the future with massive impairments (see Part 1 A. I. 4. above).

3. Violation of the fundamental right to an ecological subsistence level

In addition to the fundamental rights to life, health and property, the lack of a comprehensive legal protection concept for biodiversity also violates the fundamental right to an ecological subsistence level. If the loss of biodiversity continues, ecosystem services such as pollination or soil formation will decline rapidly - and possibly irreversibly if no action is taken in a timely manner. No precautions are currently being taken by legislators to prevent conditions of catastrophic or even apocalyptic proportions that could threaten our very existence. In this respect, there can be no other conclusion than on the right to life and health. The reference to the fundamental right to the minimum subsistence level nevertheless appears necessary for the following reason: Up to now, it has always been assumed that the state can secure the minimum subsistence level of its citizens through monetary payments if necessary. However, if the food supply as a whole begins to falter, this is of little help, as money, by its very nature, cannot be eaten. This means that there is also a violation of fundamental rights with regard to the minimum subsistence level, at the latest because the threat of irreversibility of the damage means that precautionary aspects also apply here, as with Art. 2 para. 2 sentence 1 GG.

The legislative power to concretize the right to a minimum subsistence level, which the Senate (BVerfGE 125, 175 et seq.) concedes as a substitute for the balancing requirement, changes little in all of this; rather, it underlines the result found. For a concretization of the perhaps still justifiable risks in the context of biodiversity loss would require precisely the statutory regulation sought here in the sense of a comprehensive protection concept.

All of this is underlined by an interpretation of the Basic Law that is friendly to international law. In view of the consequences described above, the loss of biodiversity not only violates the protection of life and health, but also the right to food and water under international law in light of Article 11 of the ICESCR, which guarantees the corresponding human rights (Rodriguez-Garavito/ Boyd, Transnational Environmental Law 2023, 498 et seq.; Ekardt/ Günther/ Hagemann/ Garske/ Heyl/ Weyland, Environmental Sciences Europe 2023, 80; Glinski, EJCL 2023, 416 et seq.).

II. Violation of the requirement to safeguard intertemporal freedom due to the lack of a comprehensive protection concept for biodiversity

The failure to enshrine a comprehensive protection concept for the preservation of biodiversity in law is also unconstitutional because it violates the required intertemporal safeguarding of freedoms from the rights to freedom as a whole or from Art. 2 para. 1 of the Basic Law. The deferring, inadequate management of the loss of biodiversity causes an interference-like prior effect on freedoms protected by fundamental rights (see below), because the legislator has not taken sufficient precautions to manage the protection of biodiversity, which will require more serious measures or even become impossible in later periods in the event of further deterioration, in a way that protects fundamental rights. However, encroachments on fundamental rights can only be justified under constitutional law if the underlying regulations comply with the elementary basic decisions and general constitutional principles of the Basic Law and are otherwise proportionate (BVerfGE 6, 32; 157,

30, para. 189). As will be explained below, the aforementioned lack of statutory anchoring is neither compatible with general constitutional principles, nor is it proportionate and unobjectionable in terms of formal constitutional law. The legislator is therefore not able to protect fundamental freedoms as a whole against the lack of conservation of biodiversity as such (see the right to life and health above), nor against a course in biodiversity policy that is postponed for too long and then possibly overhasty and very intrusive.

1. Imperative of intertemporal freedom protection

Under certain conditions, the Basic Law obliges us to safeguard the freedom protected by fundamental rights over time and to distribute opportunities for freedom proportionately across generations. Accordingly, the current high number of behaviors in daily life, work and business that directly or indirectly lead to further damage to biodiversity are also protected. With regard to climate change, the Senate decided that, as an intertemporal safeguard of freedom, the fundamental rights protect the complainants from a one-sided shift of the burden of greenhouse gas mitigation imposed by Article 20a and Article 2 (2) sentence 1 of the Basic Law into the future (BVerfGE 157, 30, para. 183 et seq.). In this respect, the circumstance was decisive that emission reduction measures "which are currently not taken in order to spare freedom (...) must be taken in the future under possibly even more unfavorable conditions, which then) restrict identical freedom needs and rights far more drastically (BVerfGE 157, 30, para. 120). As a result, the task of climate protection is being postponed to the younger and next generations, although "the time span for technical and social developments is becoming shorter, with the help of which the change-over from the way of life still extensively associated with CO₂ emissions today to climate-neutral behavior can be carried out in a way that protects freedom" (BVerfGE 157, 30, para. 186).

Intertemporal safeguarding of liberty therefore first requires that future losses of liberty must be established in the present (Spranger, EurUP 2023, 274 (275). First and foremost, therefore, a causal link is required between today's regulations or today's inadequate addressing of a problem and the restrictions on freedom in the future. In the words of the Senate: "*Thus, the necessary restrictions on freedom in the future are already inherent in the generosity of current climate protection law*" (BVerfGE 157, 30-177, para. 120) - whereby generosity may be read here as a euphemistic description of legislative neglect of an important regulatory task.

2. Pre-effects of fundamental rights: Present relevance of future restrictions of liberty

a) Impairment of the pre-effect of fundamental rights

The inadequate regulation of the loss of biodiversity on the part of the legislator asserted here has a pre-emptive effect on the freedom of the complainants, which is protected by the Basic Law. The main drivers of biodiversity loss are primarily agriculture with land use changes, over-fertilization and excessive use of pesticides as well

as large-scale changes to the landscape water balance, but also other factors such as constantly increasing land sealing, climate change or invasive species. As a result of current life and economic activity, future generations will be faced with dramatically reduced biodiversity, which will lead, for example, to a minimized gene pool for variety breeding or pharmaceutical research, but will also result in the extinction of pollinator populations and a decline in soil fertility, which in turn will make food production considerably more difficult and fundamentally endanger the food supply. With regard to the many ways of life that damage biodiversity, it is therefore true that they have irreversible consequences for the natural basis of life and that the possibility of recultivation can take a very long time, if it succeeds at all.

In addition to these points already known from the protection dimension of the right to life and health (see above), postponing the protection of biodiversity means that the necessary measures will one day have to be implemented with great haste. The departure from fossil fuels that is necessary for the preservation of biodiversity, the sharp reduction in animal husbandry, the different use of pesticides, etc. (see Part 1 A. I. 3.-5.) - similar to the situation in the climate resolution - fundamentally affects today's way of life. This is because nutrition in particular, in its current form with over-fertilization, excessive use of pesticides and a high proportion of animal foods, but also other areas of life affected by fossil fuels, such as mobility and heating with fossil fuels, are constitutive of today's way of life as things stand. To impose bans in this respect at very short notice, for example, would be a serious infringement of freedom. This means that biodiversity protection that respects fundamental rights, just like climate protection, requires a planned and long-term concept for protection and action that offers planning security and orientation, which has been lacking to date.

In the case of biodiversity loss, its partial irreversibility and otherwise difficult reversibility (see Part 1 A. I. 5. above) are particularly important. In view of the long regeneration times required to regain favorable conditions, it makes sense to speak of irreversibility in the legal sense, even where restoration could theoretically succeed at some point in accordance with natural law. Due to the length of time required to regain favorable conservation statuses, massive intertemporal freedom effects are measurable and can become the benchmark for legal assessments (cf. Köck, EurUP 2024, 1 (9)). As explained above, the planetary boundaries have been exceeded even more clearly in the case of biodiversity than in the case of the climate and short-term action is therefore urgently needed to safeguard intertemporal freedom in order to be able to achieve an impact with a view to the long regeneration periods - insofar as these are still possible at all.

The obligation to protect biodiversity, which must then lead to appropriate regulation with corresponding encroachments on freedom in the future at the latest, follows not only from Art. 2 para. 2 sentence 1 GG but also from Art. 20a GG. This is because the "natural foundations of life" referred to in Article 20a of the Basic Law aim to protect the totality of natural conditions that enable as many people as possible to live and survive under humane and healthy conditions (Spranger, EurUP 2023, 274 (276); Henn et al, NuR 2024, 234 et seq.). The purpose of protecting the natural foundations of life is therefore to protect life itself, which is dependent on certain basic conditions for its existence. This in turn requires the preservation of the diversity

of species of animals, plants and microorganisms, as well as their habitats, which at the same time ensures the preservation of ecosystem services. This, in turn, is a prerequisite for the preservation of the foundations of daily life, economic activity and work, so that future generations can also lead their lives without significant restrictions. Since the state is obliged to protect these foundations of life not only under Art. 2 para. 2 sentence 1 GG, but also by way of the requirement to safeguard intertemporal freedom in conjunction with Art. 20a GG. Article 20a of the Basic Law, the ongoing omission or the admission of the ongoing deterioration leads to an impairment of fundamental rights in this respect, as the state will have to act in a much more intrusive manner in the future.

b) No requirement for exact quantifiability

In view of the threat posed by the loss of biodiversity to the natural foundations of life, the legislator has a duty to avert the postponement and then very short-term approach to the loss of biodiversity. To justify the violation of the requirement to safeguard intertemporal freedoms, the Senate in the climate decision based its decision on the fact that the one-sided shift into the future, based on the temperature limit, can be quantified using the global residual emissions budget (BVerfGE 157, 30, para. 186). Corresponding calculations by the IPCC and, building on this, by the SRU make it easier, on the face of it, to check whether the reduction envisaged by the legislator was sufficient to distribute the remaining emissions over time in a way that protects fundamental rights and prevents the temperature threshold from being exceeded.

With regard to biodiversity, the situation is more strongly characterized by the heterogeneity of the protected good. Even if an even easier, homogeneous quantifiability as in the case of climate would be helpful, its absence obviously does not lead to the elimination of state obligations. Rather, the extent of biodiversity loss must be taken into account and, for its part - as well as its effects - must be very well understood. As shown, the loss of biodiversity is already leading to inadequate and poor ecosystem conditions, which in turn are relevant for the intertemporal safeguarding of freedom because we are dependent on the use of resources to support our lives (Köck, EurUP 2024, 1 (9 et seq.)). The goal of stopping the loss of biodiversity, as the core of the protection concept for the preservation of biodiversity, is even easier to grasp than the climate temperature limit, despite all the heterogeneity of the protected good: If the obligation to stop the loss of biodiversity has already existed for at least 30 years and the problem continues to worsen, it is even more concrete than a temperature target - and without the need for complex considerations of a remaining greenhouse gas budget or similar - that this cannot be done without violating fundamental rights. The inevitable intensity of intervention in the event of further postponement is therefore greater in the case of biodiversity loss than in the case of climate change - which is all the more problematic as (as explained under the topic of planetary boundaries: Part 1 A. I. 5.) the ecological situation is more dramatic in the case of biodiversity loss than in the case of climate change.

It is also easy to grasp the aspect already legally addressed in Art. 2 para. 2 sentence 1 GG and presented in the facts of the case (in Part 1 A. I. 5.) that, in addition to climate change, biodiversity loss is also characterized by irreversibility. Although some of the deterioration that has already occurred can be reversed, for example by regenerating lost habitats and reintroducing regionally extinct species, the global extinction of a species is irreversible. Even the regeneration of damaged habitats is sometimes not possible, or at least takes an extremely long time, as explained in the facts (see Part 1 A. I. 5. above; see also Köck, EurUP 2024, 1 (8)). In addition, the restoration is subject to considerable uncertainties and is made even more difficult in particular by advancing climate change. For example, the increasing scarcity of water will also make the recultivation of destroyed habitats even more difficult. Consequently, biodiversity loss will also require measures in the future that will lead to a considerable restriction of freedoms, regardless of the question of their exact quantifiability - the need for action is even greater than in the case of climate change.

3. No constitutional justification

The justification of the pre-emptive effect of the legislative omission, which is similar to an encroachment on fundamental rights, requires that it corresponds to the elementary fundamental decisions and general constitutional principles of the Basic Law, such as Art. 20a GG, and is proportionate (BVerfGE 6, 32; 157, 30, para. 189). This also applies to the suspicious, inadequate management of the loss of biodiversity by the legislator in view of the interference-like prior effect on fundamental freedoms just described. There is no constitutional justification for this, as will be shown below:

a No justification pursuant to Art. 20a GG

The lack of intertemporal protection of freedom by the legislature violates Article 20a of the Basic Law. In line with what has been said about Art. 2 para. 2 sentence 1 GG, it can be briefly summarized as follows: It is already certain that the loss of biodiversity leads to a loss of ecosystem services such as pollination, natural plant protection, soil fertility, water recharge and oxygen production, which are the basis for food production, human well-being, economic activity and survival. The loss of healthy food, clean air and water, the increase in zoonoses and possibly pandemics are to be expected as the degradation of ecosystems progresses.

In view of the precautionary principle enshrined in Article 20a of the Basic Law, legislative action is mandatory even if there were no scientific certainty regarding the planetary boundaries of biodiversity - which, however, is largely not the case, as the situation regarding the planetary boundaries can be described quite clearly (see Part 1 A. I. 5.). The violation of Art. 20a of the Basic Law cannot be changed even if the simple legislator has the power to concretize this norm. Similar to Art. 2 para. 2 sentence 1 GG, this power of concretization cannot go so far that the continuation of biodiversity loss is ultimately accepted without a comprehensive protection concept.

This follows in particular from the fact that, according to the state of scientific knowledge described above, this would have consequences for elementary areas of human life.

b Disproportionality of the intertemporal restriction of freedom

The legislator has also violated fundamental rights because it has not taken sufficient precautions to cope with the foreseeably very high adaptation burdens in the future - due to its delay in introducing a comprehensive protection concept for biodiversity - in a way that protects fundamental rights. The loss of biodiversity and its delayed regulation will increasingly restrict the possibilities of exercising freedom and enforce abstinence. This results from the following aspects:

The Basic Law obliges the protection of freedom protected by fundamental rights over time and the proportionate distribution of opportunities for freedom over the generations (BVerfGE 157, 30 para. 183). As an intertemporal safeguard of freedom, the fundamental rights protect the complainants in this respect from a one-sided shifting of the burdens imposed by Art. 2 para. 2 sentence 1 GG and Art. 20a GG into the future. It is already foreseeable that the transition to a way of life and economy without a continuous loss of biodiversity will only be possible with major disruptions in essential areas of life such as agriculture, food, construction, transport and others. The requirement of intertemporal protection of freedom is violated by the legislator to the extent that the encroachment-like effect to the detriment of fundamental freedom, which can already be observed today, is disproportionate due to the lack of legal standardization of a comprehensive protection concept. Disproportionality can only be averted here, in line with the Climate Decision, if at least the necessary transformation is initiated in good time, sufficient development pressure is conveyed and planning security is created for those subject to the law. There can be no question of any of this in a situation where the loss of biodiversity is continuing unabated and a comprehensive protection concept is not in evidence. This means that - in terms of the appropriateness stage of the proportionality test - the legislator is unilaterally balancing conflicting interests to the detriment of future freedom by postponing the problem of biodiversity loss (which is progressing more seriously than climate change, as we have seen) and relying, as if into the blue, on the fact that legislation might still follow at a later date. The planning horizon required in the climate resolution to promote development (BVerfGE 157, 30, para. 244 et seq.) is thus not provided by the legislator to any extent. This applies all the more in view of the - as seen - often irreversible or at least difficult to reverse loss of biodiversity. In this respect, the legislator accepts that the loss of biodiversity has been allowed to continue unchecked for decades, apparently in order to avoid future-oriented guard rails for economic activity and consumption. Once again, the situation appears clearer in this respect than in the climate resolution. It must also be taken into account that, in addition to halting the loss of biodiversity, nature must also be restored in view of the fact that the planetary boundaries have been greatly exceeded. This further intensifies the need to drive forward the necessary transformation even more consistently.

4. Disregard of formal justification requirements

The respondents have also violated the requirement of intertemporal protection of freedom - and the fundamental rights of protection - by failing to comply with several formal requirements for the justification of encroachments on fundamental rights. The lack of a comprehensive statutory standardization of a protection concept - in addition to the substantive constitutional guarantees described above - also violates the parliamentary reservation of fundamental rights and Article 20 (1) and (3) of the Basic Law from a formal constitutional point of view (Henn et al, NuR 2024, 234 (236)).

Based on the doctrine of materiality, which the Federal Constitutional Court has long held to be the basis for democracy and the rule of law, that parliaments and not governments must make the essential decisions, the essential biodiversity policy decisions must be made by the parliamentary legislature. However, this has not yet happened because a comprehensive protection concept in the sense of a guiding law is currently lacking. This means that the corresponding formal violation of the constitution also exists in addition to the substantive violations of the constitution described above.

Furthermore, the procedural obligation - usually understood as part of the proportionality test - to carefully establish the facts about biodiversity loss has also been violated. The continuing political inaction indicates that politicians have not yet taken sufficient note of the dramatic facts of biodiversity loss when drafting legislation. In any case, the current findings on the state of biodiversity research outlined above have clearly not been incorporated into the findings to date. Instead, the federal legislator has based its policy on the assumption that the conservation of biodiversity can be left to declarations of intent and individual legal regulations, which, however, allow the loss of biodiversity to progress further and postpone the conservation of biodiversity to future points in time - if at all. However, the Federal Constitutional Court has repeatedly made it clear (BVerfGE 157, 30; 50, 290 et seq.; systematically reviewed in Meßerschmidt, Gesetzgebungsermesseln, 2000; Ekardt, Theorie der Nachhaltigkeit, 4th ed. = 3rd ed. of the new edition 2021, § 5 C. II. 2.) that the determination of the facts on which the legislator bases its decision must be carried out carefully, even if uncertain facts generally lead to legislative leeway for assessment. If, as in the present case, the legislator has not even taken note of the more recent research on biodiversity loss in any recognizable way, this constitutes a reprehensible legislative error, also under formal constitutional law, which compels rectification.

From the perspective of an interpretation of fundamental rights that is friendly to international law, a further error in the formal justification of the restriction of freedom must also be noted. On the basis of Art. 24 para. 2 EuGRC and the underlying Art. 3 para. 1 UN Convention on the Rights of the Child of 20.11.1989 (CRC), the present constitutional complaint receives further support from another violated provision when interpreting Art. 2 para. 1, 2 para. 2 sentence 1 GG in a manner friendly to European and international law. It is to be understood in parallel as a procedural requirement (in addition to the parliamentary reservation and the requirements for the establishment of facts) and as a substantive requirement for the balancing to be carried out by the legislature, which outlines in more detail how to deal procedurally with the rights (also) under Art. 2 para. 1, 2 para. 2 sentence 1 GG in the event that children are affected. This is relevant in the constitutional complaint, which constitutes an objective objection procedure on the merits, irrespective of whether a

child is making the constitutional complaint. Art. 3 para. 1 CRC stipulates that "in all actions concerning children, whether taken by (...) courts, administrative authorities or legislative bodies, the best interests of the child shall be a primary consideration". This provision applies with the entry into force of the CRC on 05.04.1992 on the basis of the Act of Assent of 17.02.1992 and the deposit of the instrument of ratification on 06.03.1992 (BGBl II 1992 p. 121 (No. 6), BGBl II 1992 p. 990 (No. 34)) in accordance with Art. 59 para. 2 GG in Germany with the rank of a simple federal law (BVerfG, decision of 05.07.2013 - 2 BvR 708/12 - juris -). Furthermore, the content has been binding since 2009 via Art. 24 para. 2 EuGRC.

The emphasis on the best interests of the child ("best interests of the child") is enforceable in terms of purpose and content as a guideline for interpretation, consideration and discretion without further legislative steps (Nettesheim, in: Maunz/ Dürig, Kommentar zum GG, Art. 59 para. 180; OVG Nordrhein-Westfalen, DVBl. 2007, 1442 et seq.) and thus applicable without additional acts of implementation. This establishes a cross-cutting principle that is directly applicable law in Germany.

The balancing principle of Art. 24 para. 2 ECHR, 3 para. 1 CRC (also found in Art. 7 para. 2 of the Convention on the Rights of Persons with Disabilities and in Art. 5 letter b of the Convention on the Rights of Women) follows the guiding principle that the future interests of children and young people should always take precedence, because the life and survival of the next generation are the basis of human development. The regulatory objective of Art. 3 para. 1 CRC as such thus supports the importance of future interests. This gives the primacy of the best interests of the child a level of protection which, in terms of its value, fully corresponds to that of the fundamental rights contained in the Basic Law (Benassi, *Deutsche Rechtsprechung vs. UN-Kinderrechtskonvention? On the significance of Art. 3 para. 1 CRC for the realization of children's rights*, DVBl 2016, 617). A detailed interpretation of this provision can be found in the General Comment of the UN Committee on the Rights of the Child on Art. 3 para. 1 CRC of 14.01./1.02. 2013 (https://www2.ohchr.org/english/bodies/crc/docs/gc/crc_c_gc_14_eng.pdf). Two detailed legal opinions under international law shed light on the details of the provision (Lorz, *Der Vorrang des Kindeswohls nach Art. 3 der UN-Kinderrechtskonvention in der deutschen Rechtsordnung*. A legal opinion, published by the National Coalition for the Implementation of the UN Convention on the Rights of the Child in Germany, Berlin 2003; Lorz, *Was bedeutet die uneingeschränkte Verwirklichung des Kindeswohlvorrangs nach der UN-Kinderrechtskonvention im deutschen Recht?* ed. National Coalition for the Implementation of the UN Convention on the Rights of the Child in Germany, Berlin 2010 (https://www.netzwerk-kinderrechte.de/fileadmin/publikationen/Lorz_Expertise_gesamt.pdf; for more details on this and the explanations here, see also Eichholz, *Der Vorrang des Kindeswohls - die Bedeutung von Art. 3 Absatz 1 der UN-Kinderrechtskonvention für die deutsche Rechtsprechung*. Basic paper for the training and further education of lawyers, judges and the professions concerned with children's issues, published by the National Coalition Germany - Network for the Implementation of the UN Convention on the Rights of the Child, Berlin 2015, https://www.netzwerk-kinderrechte.de/fileadmin/bilder/user_upload/Text_Eichholz_24112015.pdf).

In order to comply with the procedural requirement to take into account the interests of children and adolescents, it must be explicitly stated and explained what best corresponds

to the priority of their interests in all state action - i.e. also in the standardization of a halt to biodiversity loss and a comprehensive protection concept (or previously in the omission of these steps). In terms of substantive law, Art. 3 CRC requires that special weight be given to these interests over other concerns. In terms of procedural law, it is a mandatory maxim that the interests of the next generation must be explored and presented in detail in order to then weigh up the weight to be given to them in the balancing of other interests, whereby the best interests of the child must always be taken into account as a primary consideration (Schmahl, UN Convention on the Rights of the Child, 2nd ed. 2017, Art. 3 para. 3-13). The decision made after consideration must be justified and documented, highlighting the aspects that have been weighed up. In particular, if children's interests are to take a back seat in individual cases, it must be explained in detail that their interests were nevertheless given priority in the consideration.

In the sense of an interpretation of the provisions of fundamental rights complained of in the present case, namely Art. 2 para. 1 GG, which is friendly to international law (and in conformity with EU law), it can be assumed that this provision must also be taken into account at the constitutional level. If this were not the case, there would be a violation of international law because the legislation would then no longer be subject to the requirements of Art. 3 CRC. And according to its explicit wording, Art. 3 CRC also refers to legislation. With regard to the preservation of biodiversity, it is in no way apparent that the legislator would have carried out this existing requirement of a balancing of interests in a procedurally and materially verifiable manner. In contrast, the fact that the loss of biodiversity impairs the rights of the child in the sense just outlined has already been reaffirmed under the CRC by the UN Committee on the Rights of the Child in CRC General Comment 26 on children's rights and the environment with a special focus on climate change of 22.08.2023. This constitutes a violation of the constitution. The legislator must decide anew on stopping the loss of biodiversity and a comprehensive protection concept for it, giving priority to the best interests of the child.

III. Summary

The admissible constitutional complaint is therefore well-founded. Consequently, we request the Federal Constitutional Court not only to find a violation of the constitution in accordance with the request made under I., but also to order the Bundestag and the Bundesrat to take appropriate measures within a period to be determined by the Federal Constitutional Court in order to enshrine a comprehensive protection concept for biodiversity in law, which standardizes the halting of biodiversity loss as a goal as well as providing for restoration measures, in accordance with the request under II.

C. Acceptance of the constitutional complaint

The constitutional complaint must also be accepted for decision.

The constitutional complaint must be accepted for decision because it is of fundamental importance under constitutional law and it is also necessary to enforce the fundamental rights under Art. 2 para. 2 sentence 1, Art. 14 para. 1 sentence 1 and Art. 2 para. 1 as well as Art. 2 para. 1, 20 para. 3 GG (Art. 93a para. 2 BVerfGG).

The constitutional complaint is initially of fundamental constitutional importance, as it serves to clarify the question of how far the protective rights and the required intertemporal safeguarding of freedom on the part of the legislator extend with regard to the threats posed by the loss of biodiversity. The constitutional complaint thus requires the interpretation and application of constitutional law in the form of determining the scope of the guarantee of the aforementioned fundamental rights, interpreting the fundamental rights in accordance with international law and, if applicable, EU law, as well as the interpretation or further development of objective constitutional law (Art. 20a GG). The standard of the level of protection to be guaranteed, taking into account international law, is, as far as can be seen, unresolved under constitutional law and thus represents a fundamental issue that requires a further development of the previous case law of the Federal Constitutional Court on protective rights and the intertemporal safeguarding of freedom.

The constitutional complaint continues to be of fundamental importance with regard to the right of private individuals and environmental associations to complain about the effects of biodiversity loss.

In addition, the constitutional complaint must be accepted for decision as it is necessary to enforce the aforementioned fundamental rights. The complainants have no other means of legal protection than the constitutional complaint with which they could bring a legislative omission to judicial review. At the same time, it should be noted that the complainants would suffer a particularly serious disadvantage if the decision on the merits were denied due to the serious and irreversible threats that are emerging. Furthermore, it must be taken into account that the violations of fundamental rights asserted here affect a large number of people due to the effects of the loss of biodiversity and are therefore relevant for a large number of holders of fundamental rights both now and in the future.

Consequently, we respectfully request the Federal Constitutional Court to accept the constitutional complaint for decision and to rule in accordance with the application.

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List of attachments

Powers of attorney as **Annexes BF 1 to BF 8**

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