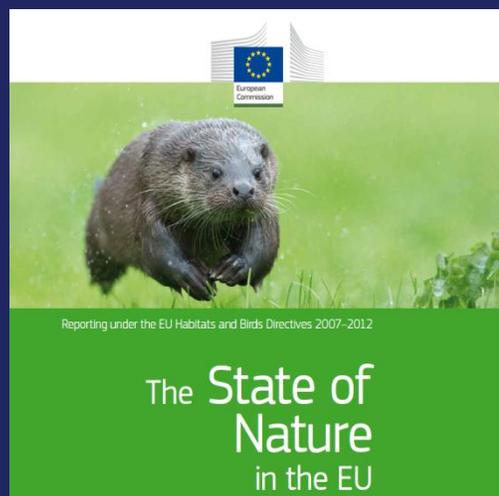


THE EUROPEAN ENVIRONMENT STATE OF NATURE & STATE AND OUTLOOK 2015



State of Nature report 2015

Presentation by Mr Ronan Uhel, Head of Programme, Natural Systems and Vulnerability, EEA
Nature Conference – ‘EU Biodiversity Strategy implementation’ – 26-27 May 2015, Riga

European Environment Agency



SOER 2015

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A comprehensive assessment of past trends and future outlooks and of opportunities to recalibrate policies, knowledge, investments and innovations in line with the long-term vision of the 7th EAP.

SOER 2015 Synthesis report

SOER 2015 Assessment of global megatrends

**Global
megatrends**

11 briefings

**European
briefings**

25 briefings

**Cross-country
comparisons**

9 briefings

**Countries and
regions**

39+3 briefings

Key messages from SOER 2015

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- **Policies** have delivered substantial benefits for the environment, economy and people's well-being; major challenges remain.
- Europe faces persistent and emerging challenges linked to production and consumption **systems**, and the rapidly changing **global** context.
- Achieving the 2050 vision requires system **transitions**, driven by more ambitious actions on policy, knowledge, investments and innovation.
- Doing so presents major **opportunities** to boost Europe's economy and employment and put Europe at the frontier of science and innovation.

Vision of the 7th Environment Action Programme

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‘In 2050, we live well, within the planet's ecological limits.

Our prosperity and healthy environment stem from an innovative, **circular economy** where nothing is wasted and where natural resources are managed sustainably, and **biodiversity** is protected, valued and restored in ways that enhance our society's **resilience**. Our **low-carbon** growth has long been decoupled from resource use, setting the pace for a global safe and sustainable society.’

Source: 7th EU Environment Action Programme

Assessing past trends and future outlooks

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The Synthesis report addresses the three thematic priority objectives of the 7th EAP:

1. Protecting, conserving and enhancing natural capital
2. Resource efficiency and the low-carbon economy
3. Safeguarding from environmental risks to health

Two overall patterns emerge:

- Resource efficiency improvements have been notable but have not translated into increased ecosystem and social resilience
- The long-term outlook is often less positive than recent trends

Four interlinking capitals

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Natural capital



Social and Cultural capital



Human capital



Manufacturing capital



How to get there: mobilising financial capital and...

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...using the green economy as an integrating framework

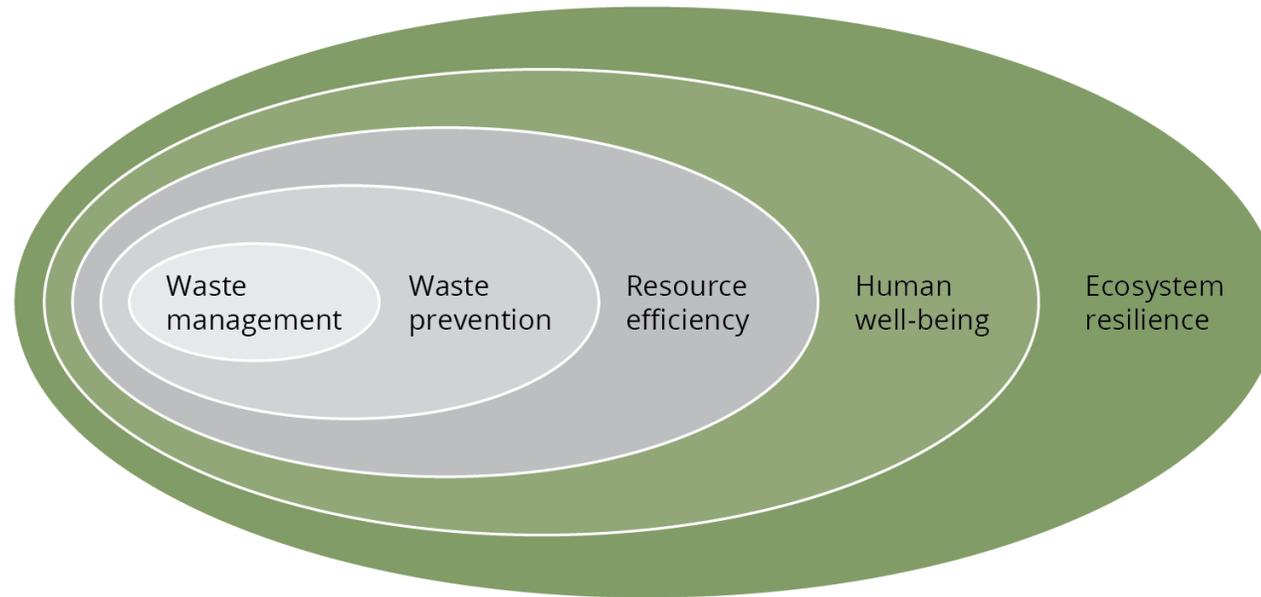
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Circular economy focus

Green economy focus

Source: EEA.

Natural capital and ecosystem services

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- Europe's natural capital is under growing cumulative pressure from intensive agriculture, fisheries and forestry, and urban sprawl.
- A substantial volume of relevant EU legislation already exists but lacks adequate integration to sectoral policies.
- Mismanagement of natural capital also persists because its full value is not reflected in socio-economic policies and choices despite its fundamental importance for society's welfare.
- Sustained efforts are needed globally to integrate it into national accounts.



Thematic priority objective 1: Protecting, conserving and enhancing natural capital

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	Past (5–10 year) trends	20+ years outlook	Progress to policy targets
➤ Terrestrial and freshwater biodiversity			☐
➤ Land use and soil functions			No target
➤ Ecological status of freshwater bodies			☒
➤ Water quality and nutrient loading			☐
➤ Air pollution and its ecosystem impacts			☐
➤ Marine and coastal biodiversity			☒
➤ Climate change impacts on ecosystems			No target

Improving trends dominate  Largely on track 

Trends show mixed picture  Partially on track 

Deteriorating trends dominate  Largely not on track 

Source: EEA. SOER 2015 Synthesis report.

'Our life insurance, our natural capital: an EU biodiversity strategy to 2020'

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Overall target of: ***'Halting the loss of biodiversity and the degradation of ecosystem services in the EU by 2020, and restoring them in so far as is feasible, while stepping up the EU contribution to averting global biodiversity loss'***.

Six targets:

1. Conserving and restoring nature.
2. Maintaining and enhancing ecosystems and their services.
3. Ensuring the sustainability of agriculture, forestry and fisheries.
4. Ensuring the sustainability of fisheries.
5. Combating invasive alien species.
6. Addressing the global biodiversity crisis.

A mid-term review of progress towards the targets will be published later in 2015 by the European Commission.

Biodiversity loss – a key concern

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- Biodiversity underpins ecosystem functioning and the provision of ecosystem services.
- Conserving biodiversity is not just about protecting species and habitats for their own sake.
- It is also about maintaining nature's capacity to deliver goods and services and to ensure long-term ecosystem resilience.



State of Nature reporting 2015

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EEA technical analysis supporting the forthcoming European Commission Composite Report



The present reporting exercise involved the collation of over 17,000 datasets on individual species and habitats from 27 countries (Croatia was not included as it only joined the EU in July 2013). These were subsequently used to assess the status of around 450 wild bird species, 230 habitat types and more than 1,200 other species of European importance.

European Environment Agency



EU status of birds (Birds Directive) - 2008-2012

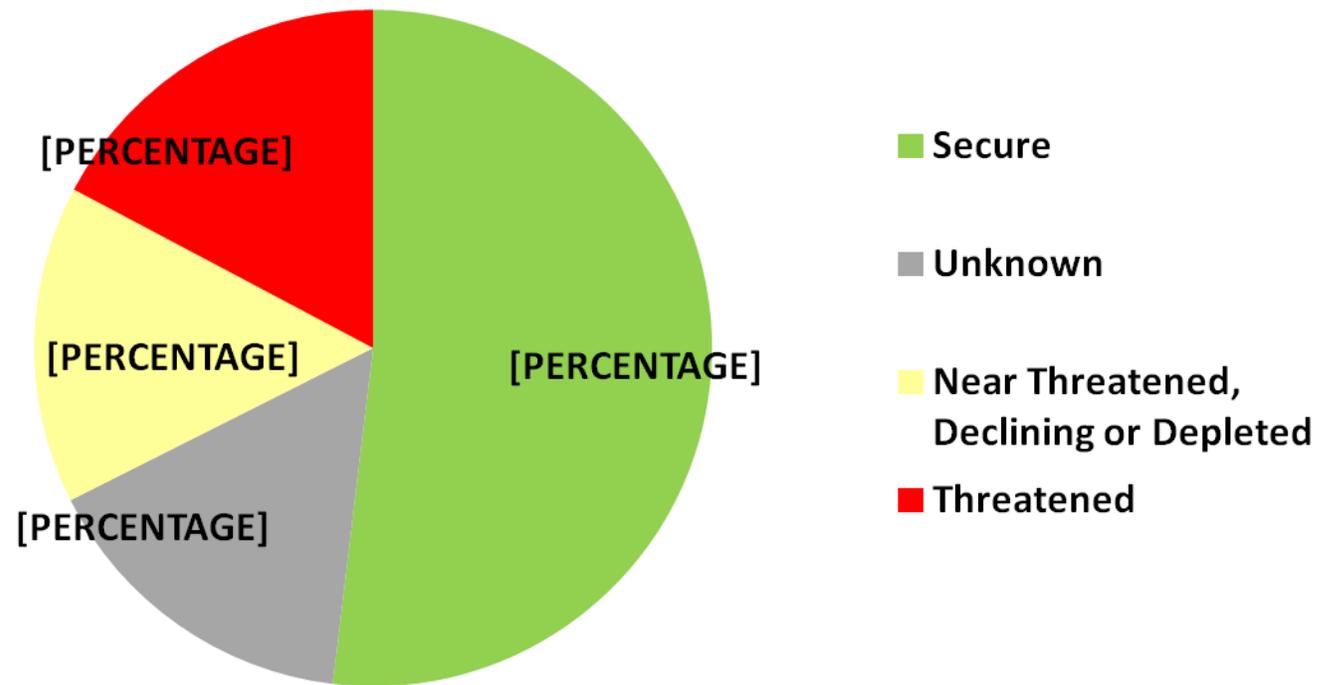
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All bird species from the EU

Source: EEA. State of Nature report, 2015.

EU conservation status (Habitats Directive) - 2007-2012

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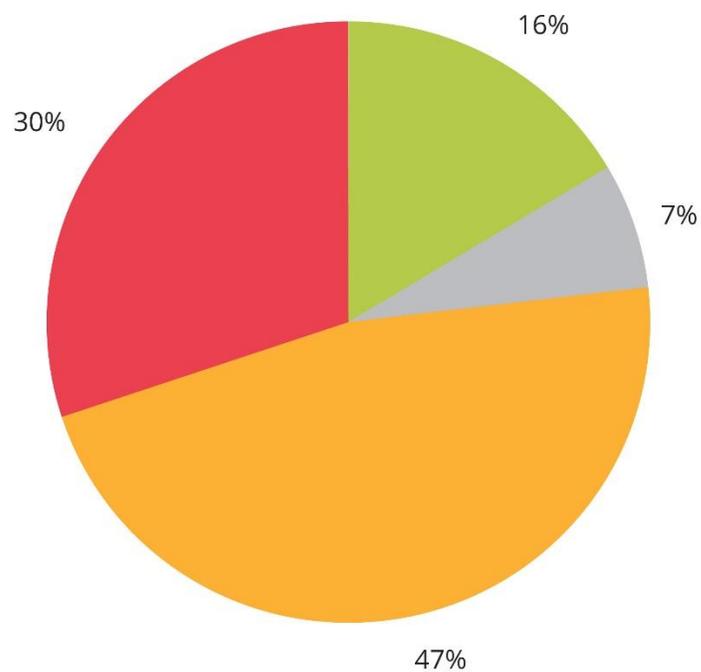
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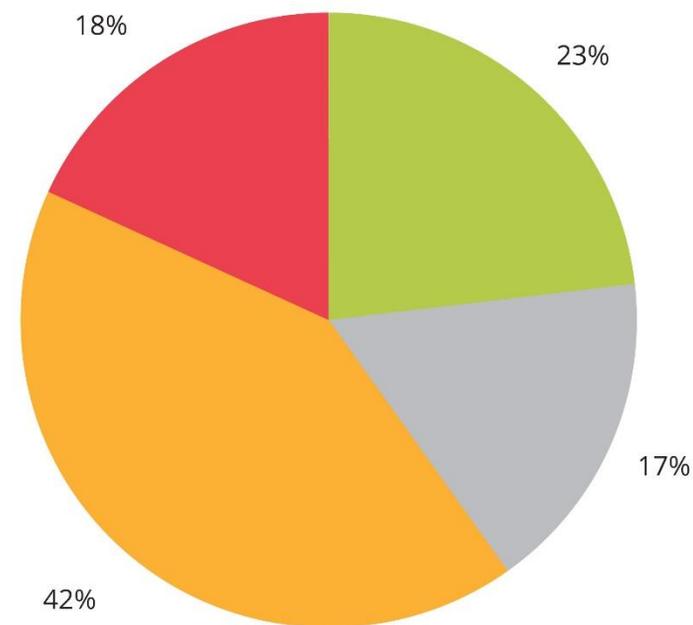
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Habitats



Favourable
Unfavourable-inadequate
Unknown
Unfavourable-bad

Species



Favourable
Unfavourable-inadequate
Unknown
Unfavourable-bad

Source: EEA. State of Nature report, 2015.

Selection of EU habitats and species

European Environment Agency



Distance to Target 1 of the EU Biodiversity Strategy (2020)

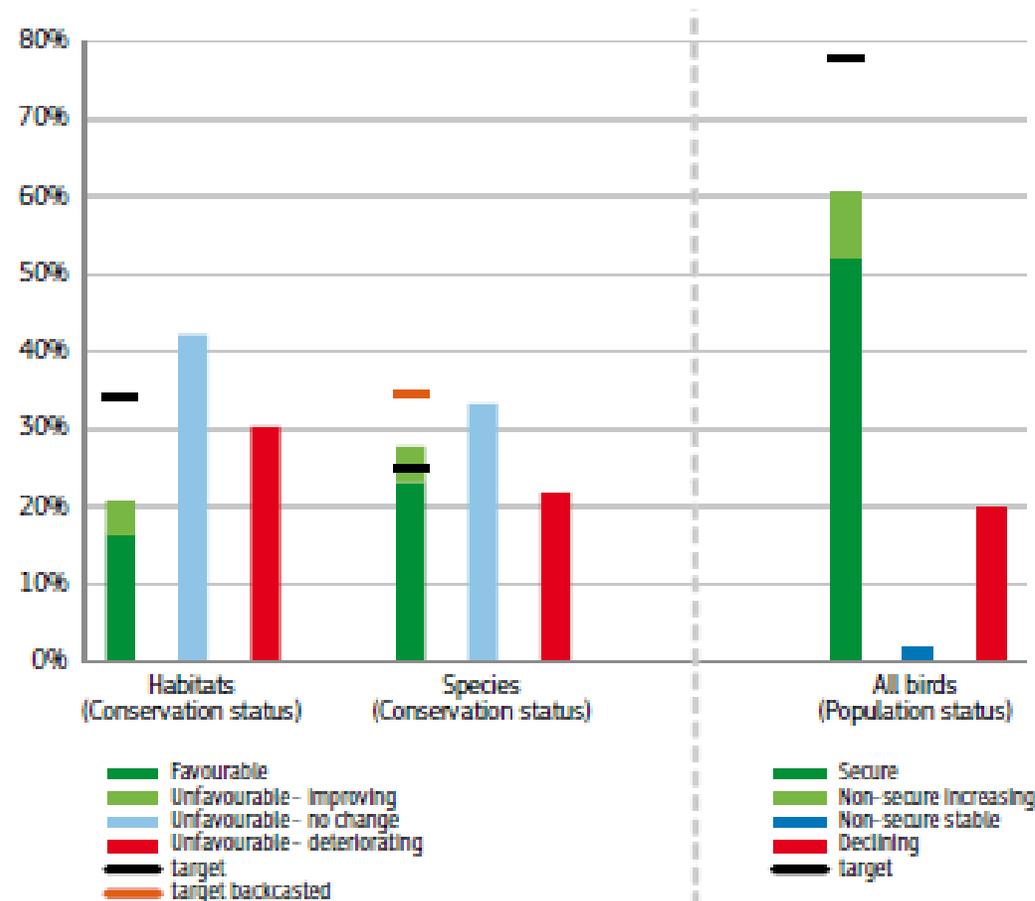
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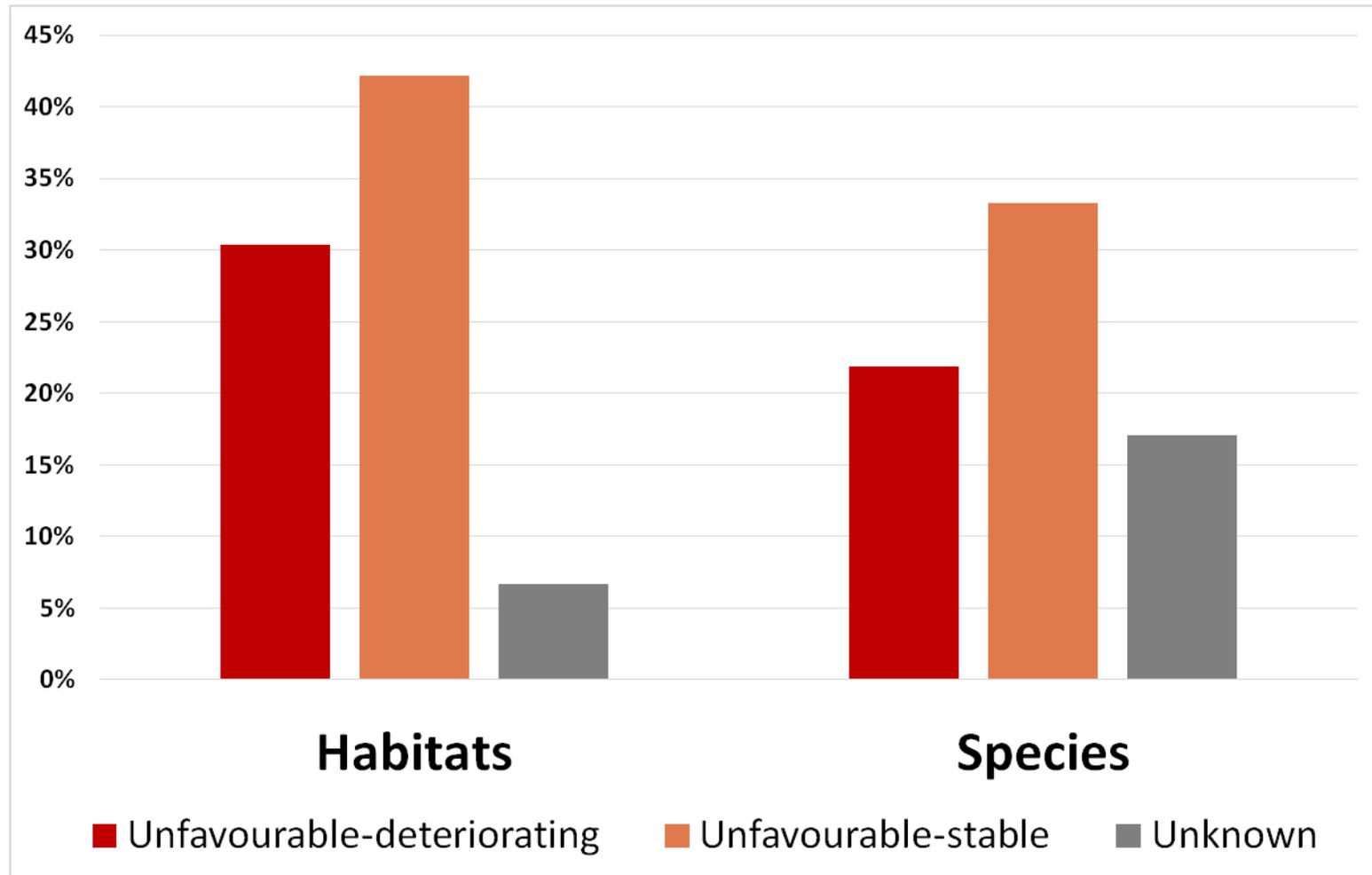
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Progress towards Target 1 of the Biodiversity Strategy

Progress towards Target 1 (Habitats Directive)



Main problems reported by Member States - pressures

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Agriculture

- Intensification: pesticides, nutrients, overgrazing, fragmentation
- Abandonment: lack of management, undergrazing

Changes in hydraulic conditions

- Dams, dykes, canalisation
- Water abstraction and deviation

Forestry

- intensive management
- Afforestation

Urbanisation, grey infrastructure

Aquaculture, hunting, trapping, poisoning

Trends in drivers and impacts on ecosystems

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Ecosystem type	Habitat changes	Climate change	Overexploitation	Invasive species	Pollution and nutrient enrichment
Urban	↗	↑	↗	↗	↑
Cropland	↗	↑	↗	↗	↑
Grassland	↗	↑	↗	↗	↑
Woodland and forest	↘	↑	→	→	↗
Heathland, shrub and sparsely vegetated land	→	↑	→	↗	↗
Freshwater (rivers and lakes)	→	↑	→	↗	↘
Wetlands	→	↑	→	↗	↘
Marine (transitional and marine waters, combined)	↗	↑	↗	↗	↗

Key:

Driver's actual trends			
↘	→	↗	↑
Decreasing	Continuing	Increasing	Very rapid Increase
Driver's Impact on biodiversity (past evolution)			
Low	Moderate	High	Very High

According MAES
classification

Pressures stem from major threats to biodiversity and ecosystems (1/2)

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- The key threats — **habitat change, pollution, over-exploitation, invasive alien species, and climate change** — continue to exert pressure causing loss of species and habitats and resulting in ecosystem degradation with loss of ecosystem services.
- **Habitat change** — including loss, fragmentation and degradation — of natural and semi-natural areas. E.g. through urban sprawl, grey infrastructure developments, agricultural intensification, and intensely managed forests.
- **Pollution:** some pollution pressures have decreased, but nitrogen levels still at levels that harm nature.

Pressures stem from major threats to biodiversity and ecosystems (2/2)

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- **Over-exploitation** of natural resources. In particular in the marine environment where many fish stocks are still fished above their maximum sustainable yield.
- **Invasive alien species** is an important driver of biodiversity loss. They also causes considerable economic damage to agriculture, forestry and fisheries worth billions of euros per year.
- **Climate change** is already affecting species and ecosystems, and is projected to become a more significant threat. Climate change also interact with and exacerbate other threats.

Overall, Europe's biodiversity and ecosystems are under growing cumulative pressure from intensive agriculture, fisheries and forestry, and urban sprawl.

Benefits from biodiversity

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Examples of benefits from biodiversity include:

- Fisheries.
- Healthy freshwater ecosystems that provide clean water.
- Intact wetlands that act as natural buffers against floods.
- Peat bogs that help fix and store carbon dioxide.
- Forests that improve air & soil quality, provide recreational value etc.

Meanwhile...

- The benefits that flow from Natura 2000 are of the order of €200 to 300 billion/year.
- It is estimated that Natura 2000 sites generate recreational benefits worth up to €9 billion per annum.

Conclusions

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- Implementation of the nature directives is showing some results.
- Yet they are not enough to reach the 2020 targets: unfavourable status and negative trends are still predominant.
- Further implementation needed, upscaling of measures from local to national and EU.
- Nature directives and biodiversity strategy are fundamental to protecting and restoring natural capital, but are not enough.
- Achieving the 2050 vision requires more ambitious actions on policy, knowledge, investments and innovation.

Optional slides

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SOER 2015 — The European environment — state and outlook 2015

A comprehensive assessment of the European environment's state, trends and prospects, in a global context.



Synthesis report



Global megatrends



European briefings



Cross-country comparisons



Countries and regions

The synthesis report informs future European environmental policy in general and its implementation between 2015 and 2020 in particular. It includes a reflection on the European environment in a global context, as well as chapters summarising the state of, trends in, and prospects for the environment in Europe.

- [Table of contents](#)
- [Foreword](#)
- [Executive summary](#)
- [1. The changing context of European environmental policy](#)
- [2. The European environment in a wider perspective](#)
- [3. Protecting, conserving and enhancing natural capital](#)
- [4. Resource efficiency and the low-carbon economy](#)
- [5. Safeguarding people from environmental risks to health](#)
- [6. Understanding the systemic challenges facing Europe](#)
- [7. Responding to systemic challenges: from vision to transition](#)
- [References and bibliography](#)

Synthesis report in several languages  

Explore SOER 2015



 Presentation of key facts and figures.

 Online search among all figures.



Key messages

[Waste — municipal solid waste generation and management](#): The large differences in performance indicate room for further improvement and actions to meet the 2020 target to recycle 50% of municipal waste. [See briefing](#)

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Biodiversity

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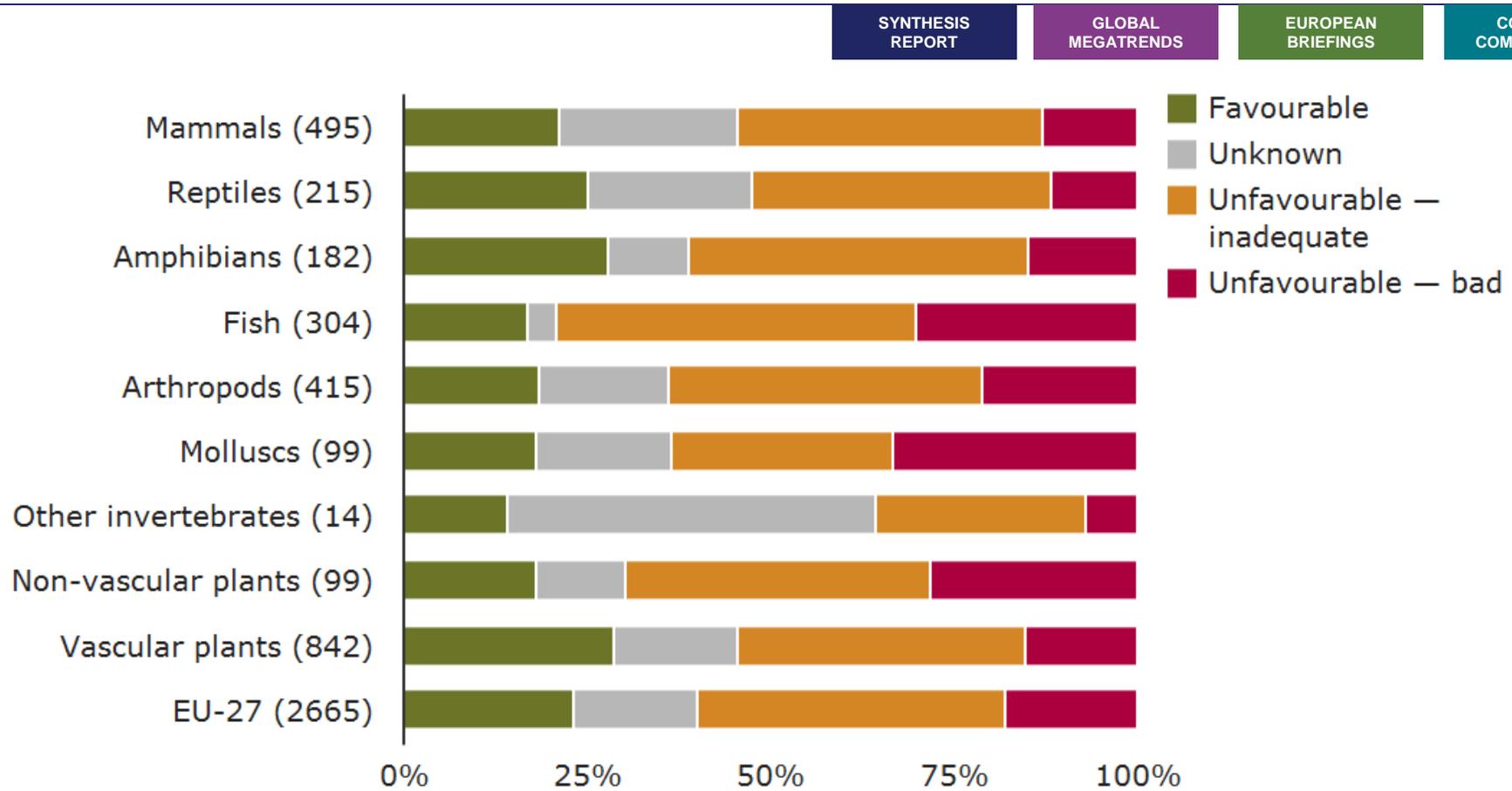
- Europe's biodiversity continues to be eroded resulting in ecosystem degradation.
- 60 % of protected species assessments and 77 % of habitat assessments recorded an unfavourable conservation status.
- Constant habitat loss, diffuse pollution, over-exploitation of resources, and growing impacts of invasive alien species and climate change contribute cumulatively.
- The main EU target of 'halting the loss of biodiversity and the degradation of ecosystem services' by 2020 remains a serious challenge.

Terrestrial and
freshwater
biodiversity

Climate change
impacts on
ecosystems

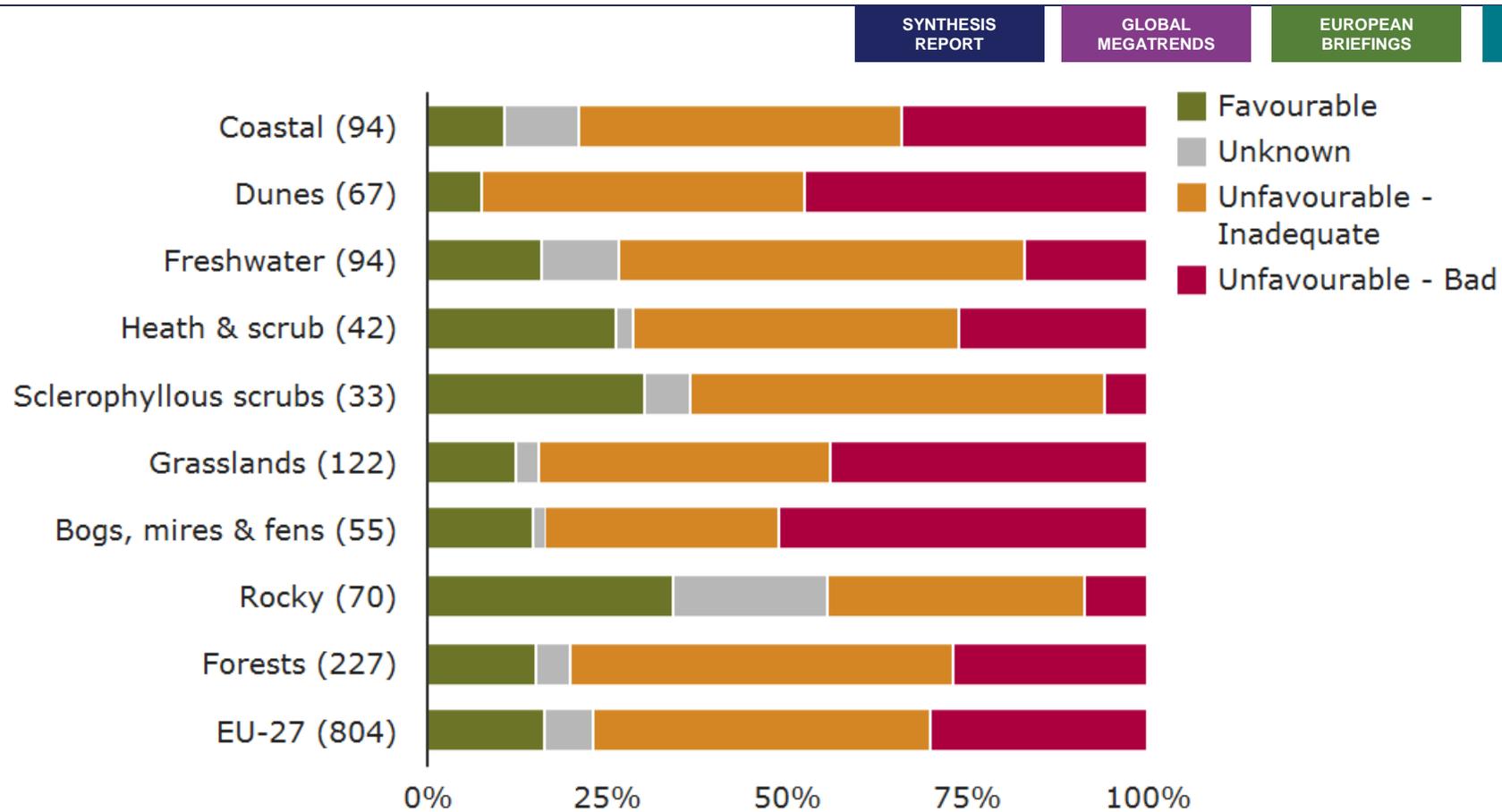
Biodiversity

Conservation status of species of European interest



Data sources: EEA. Conservation status of habitat types and species (Article 17, Habitats Directive 92/43/EEC)

Conservation status of habitats of European interest



Data sources: EEA. Conservation status of habitat types and species (Article 17, Habitats Directive 92/43/EEC)