



International Year of Soils and EU Soil Policy

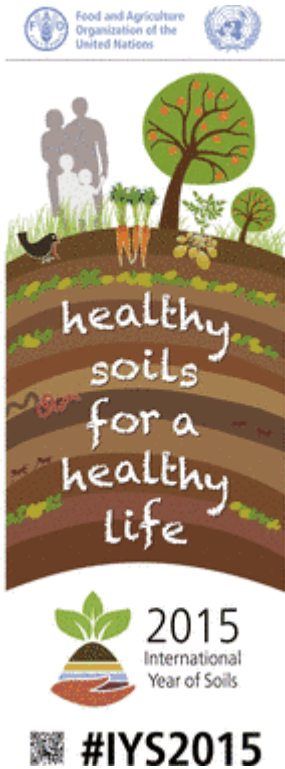
**Visit BOKU –University of Vienna
Seminar on the occasion of the IYS
2015: Soil the basis for life**

**Austrian Permanent Representation
Brussels, Friday 16.01.2015**

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- ❖ The International Year of Soils 2015
- ❖ Soils in the context of EU policies
 - ❖ There is no EU soil legislation
 - ❖ Why should we care about Soil protection at EU level?
 - ❖ The Soil Thematic Strategy and Soil Framework Directive proposal
 - ❖ What next?
 - ❖ Reference material



The International Year of Soils

The International Year of Soils 2015



- The 68th UN General Assembly declared 2015 the International Year of Soils (IYS).
- The Food and Agriculture Organization (FAO) has been nominated to implement the IYS in the frame of the Global Soil Partnership (GSP) and in collaboration with Governments and the secretariat of the United Nations Convention to Combat Desertification.

"The International Year of Soils will help us pave the road toward sustainable development for all and by all".

José Graziano da Silva, FAO Director-General

PROTECT OUR SOILS

Our soils are in danger because of expanding cities, deforestation, unsustainable land use and management practices, pollution, overgrazing and climate change.

The current rate of soil degradation threatens the capacity to meet the needs of future generations.



WE DEPEND ON SOILS



Healthy soils are the basis for healthy food production



Soils are the foundation for vegetation which is cultivated or managed for feed, fibre, fuel and medicinal products



Soils support our planet's biodiversity and they host a quarter of the total



Soils help to combat and adapt to climate change by playing a key role in the carbon cycle



Soils store and filter water improving our resilience to floods and droughts



Soil is a non-renewable resource, its preservation is essential for food security and our sustainable future

SPECIFIC OBJECTIVES



Raise awareness among civil society and decision makers



Educate the public



Support effective policies and actions for the sustainable management and protection of soil resources



Promote investment in sustainable soil management activities



Strengthen initiatives in connection with the Sustainable Development Goals (SDG) process and Post-2015 agenda



Advocate for rapid capacity enhancement for soil information collection and monitoring at all levels

INTERNATIONAL YEAR OF SOILS 2015



The International Year of Soils 2015



- ❖ At EU level we consider the IYS as very important for raising awareness on Soils and create a momentum for further policy development
- ❖ Examples of activities:
 - ❖ Creation of an IYS webpage on the EUROPA Environment web site
http://ec.europa.eu/environment/soil/iys2015/index_en.htm
 - ❖ Our Commissioner Karmenu Vella delivered a video message at the Ceremony of the IYS opening in Roma on 5 December (the World Soil Day)
 - ❖ Many events in EU all along the Year 2015...

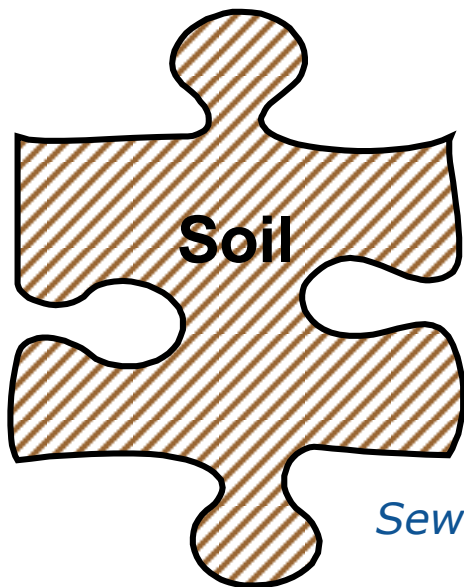
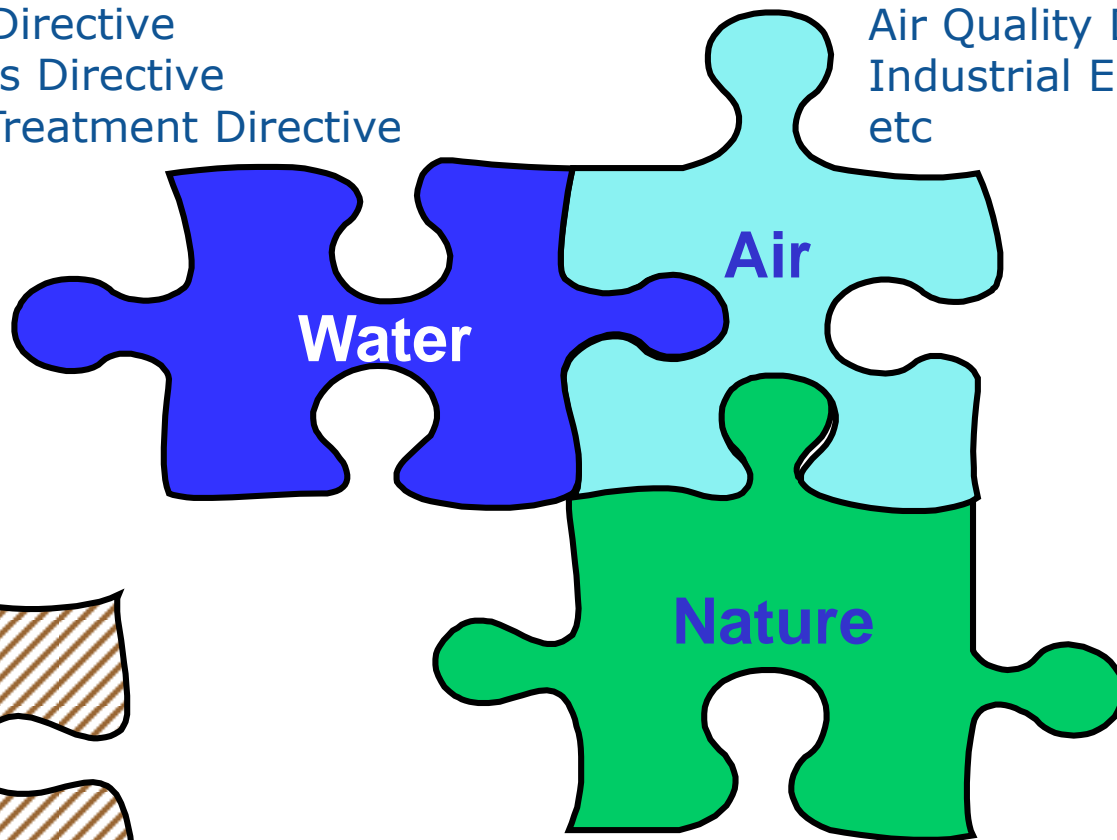
Soils in the context of EU policies

There is no EU legislation on soil protection



Water Framework Directive
Groundwater Directive
Bathing Waters Directive
Waste Water Treatment Directive
etc

Air Quality Directives
Industrial Emissions Directive
etc



Sewage Sludge Directive

Habitats Directive
Birds Directive
Invasive Alien Species Regulation
etc

Why should we care about Soil protection at European level?

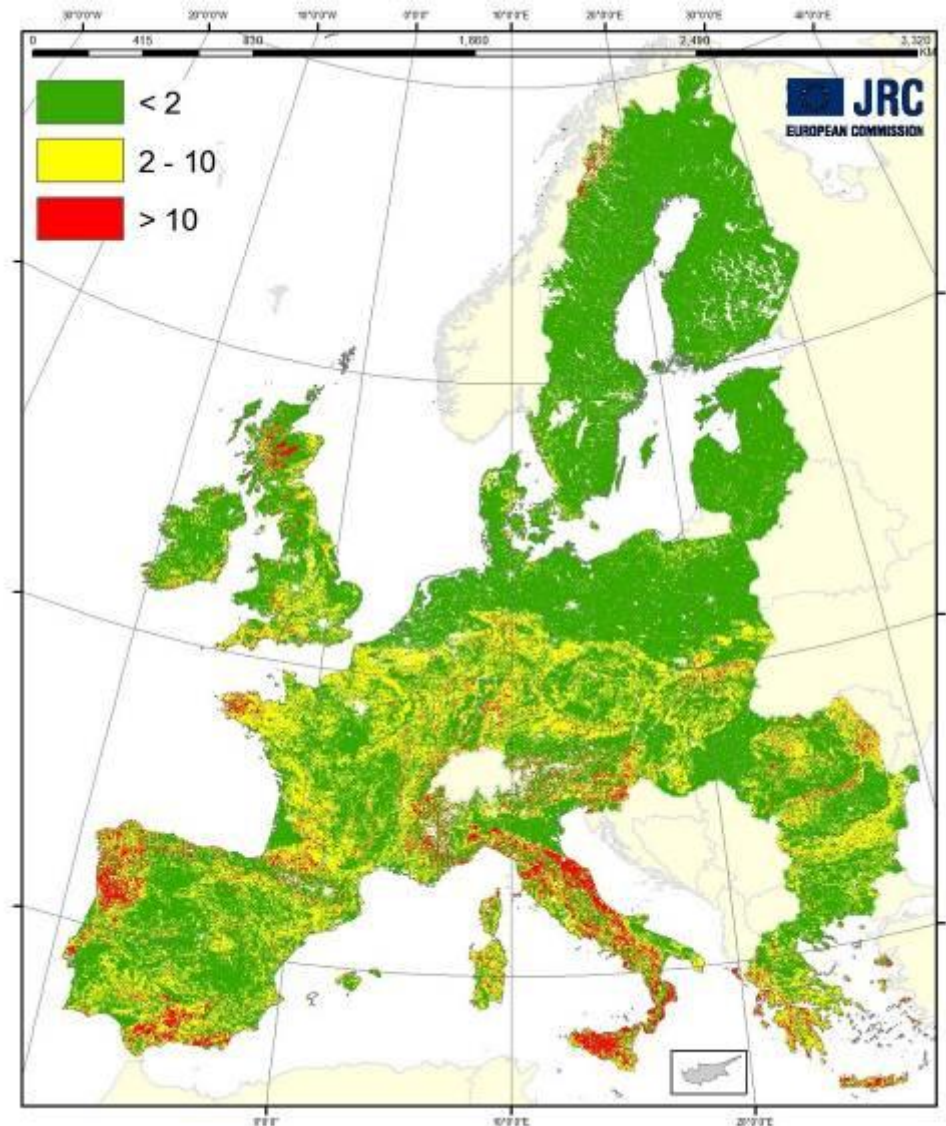
Soil erosion by water



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RUSLE model by the
JRC: **1.3 million
km²** in EU-27
affected by soil
erosion by water.
Almost **20%** of
these are subject to
a soil loss **in excess
of 10 t/ha/y.**

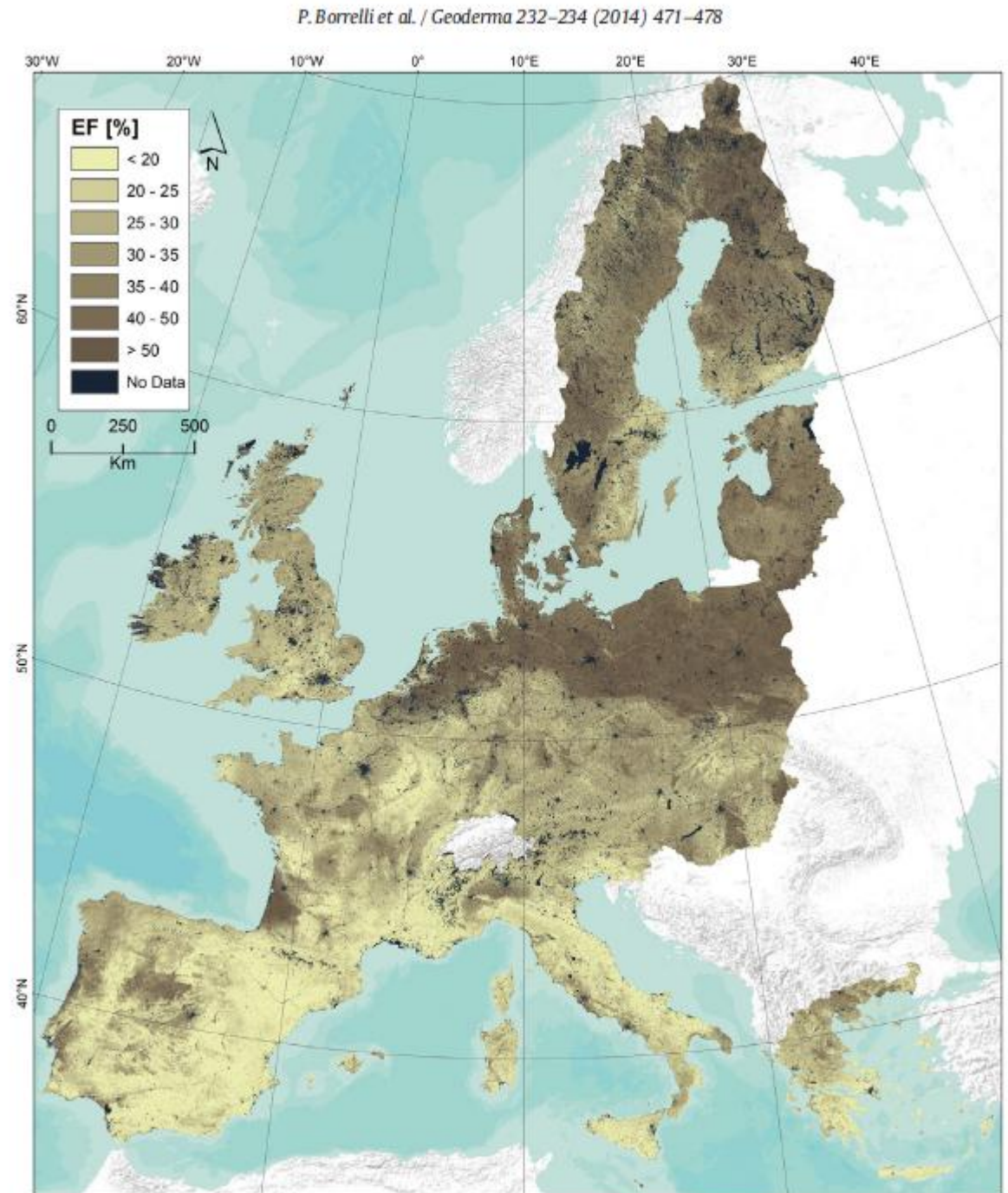
Source: JRC (2012)



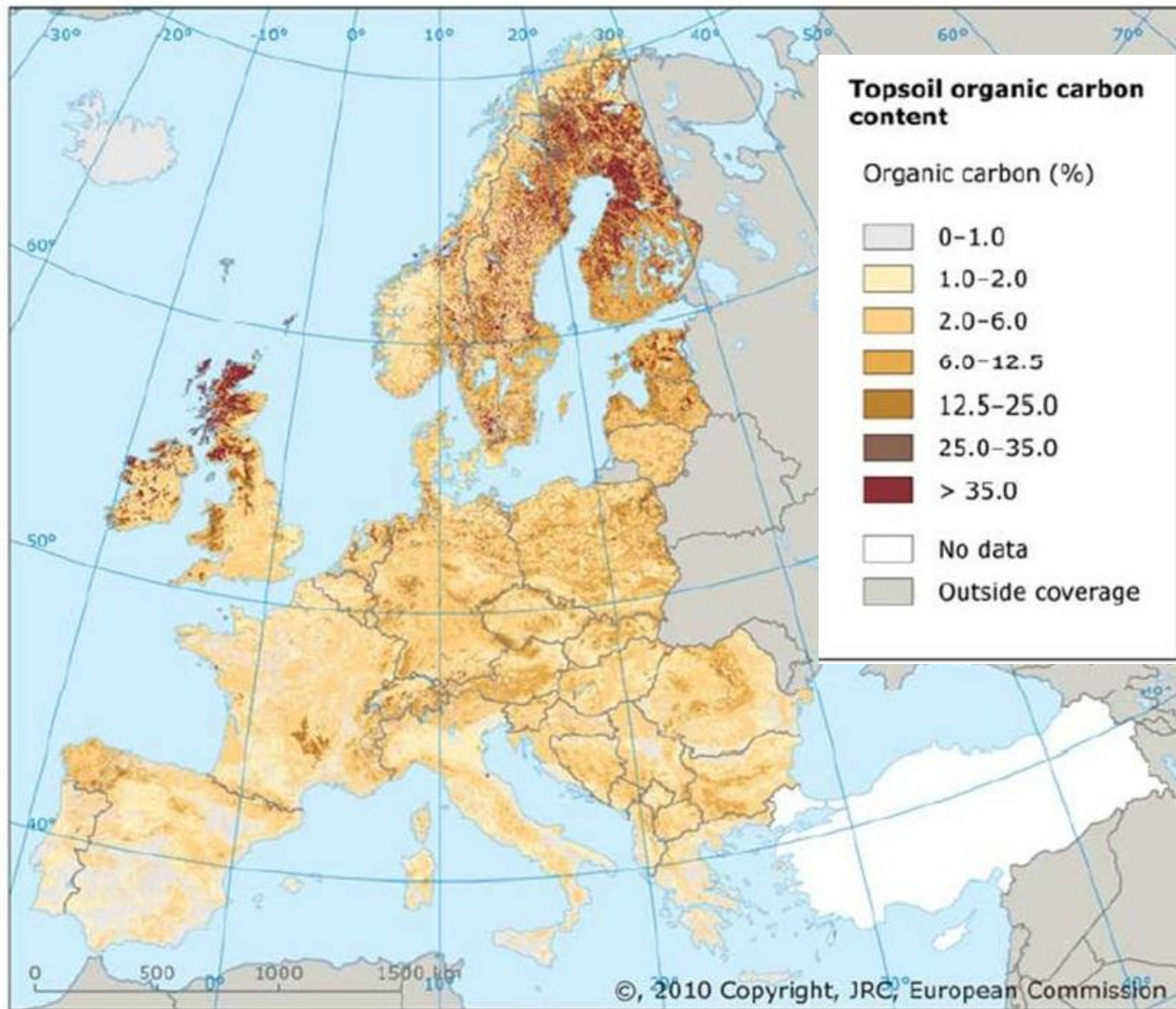
Soil erosion by wind

Map of wind erosion
susceptibility of
European soils
(500m spatial
resolution) based on
the estimation of the
wind-erodible
fraction of soil (EF).

Source: Borrelli et al. (2014)



Soil organic carbon

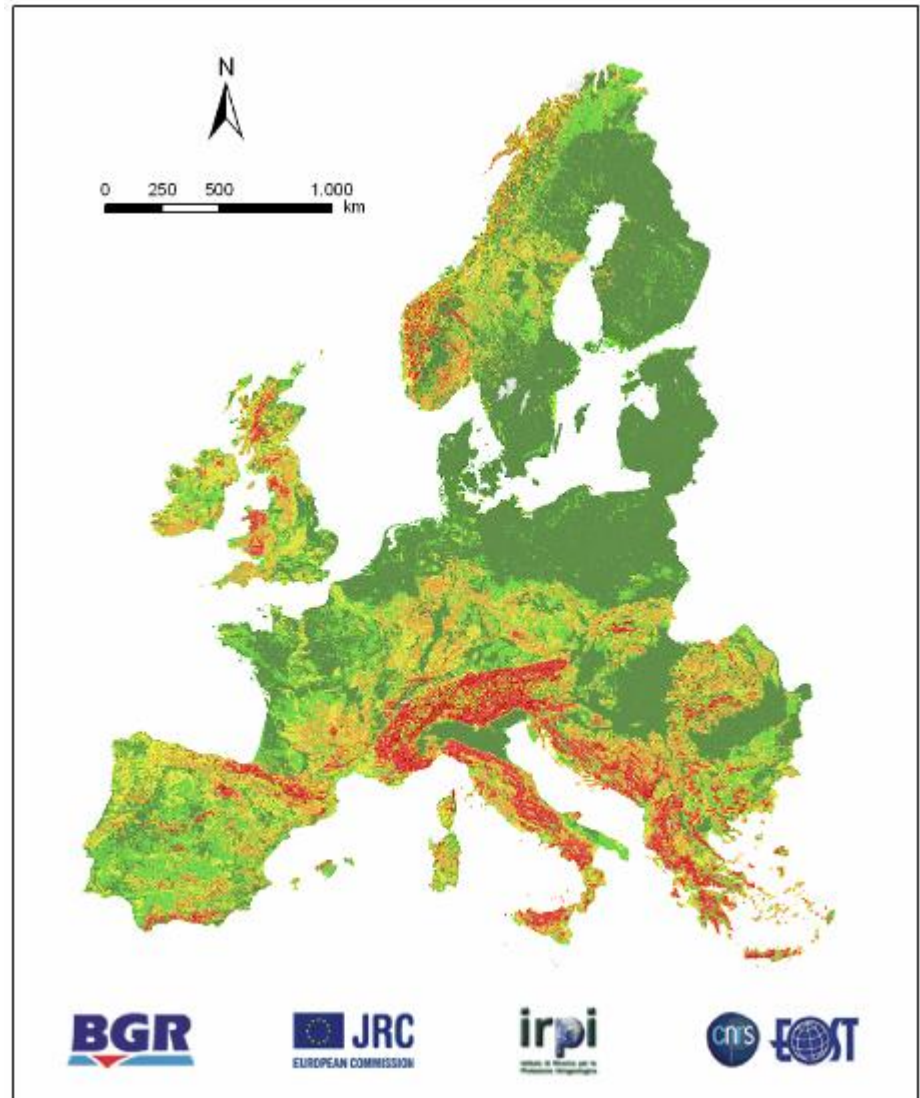


Landslides



Landsides
susceptibility map.
Over 630,000
landslides are
currently registered
in national
databases.
Estimated affected
surface areas are:
7% Italian territory,
5% Slovakian
territory, 1%
Portuguese territory.

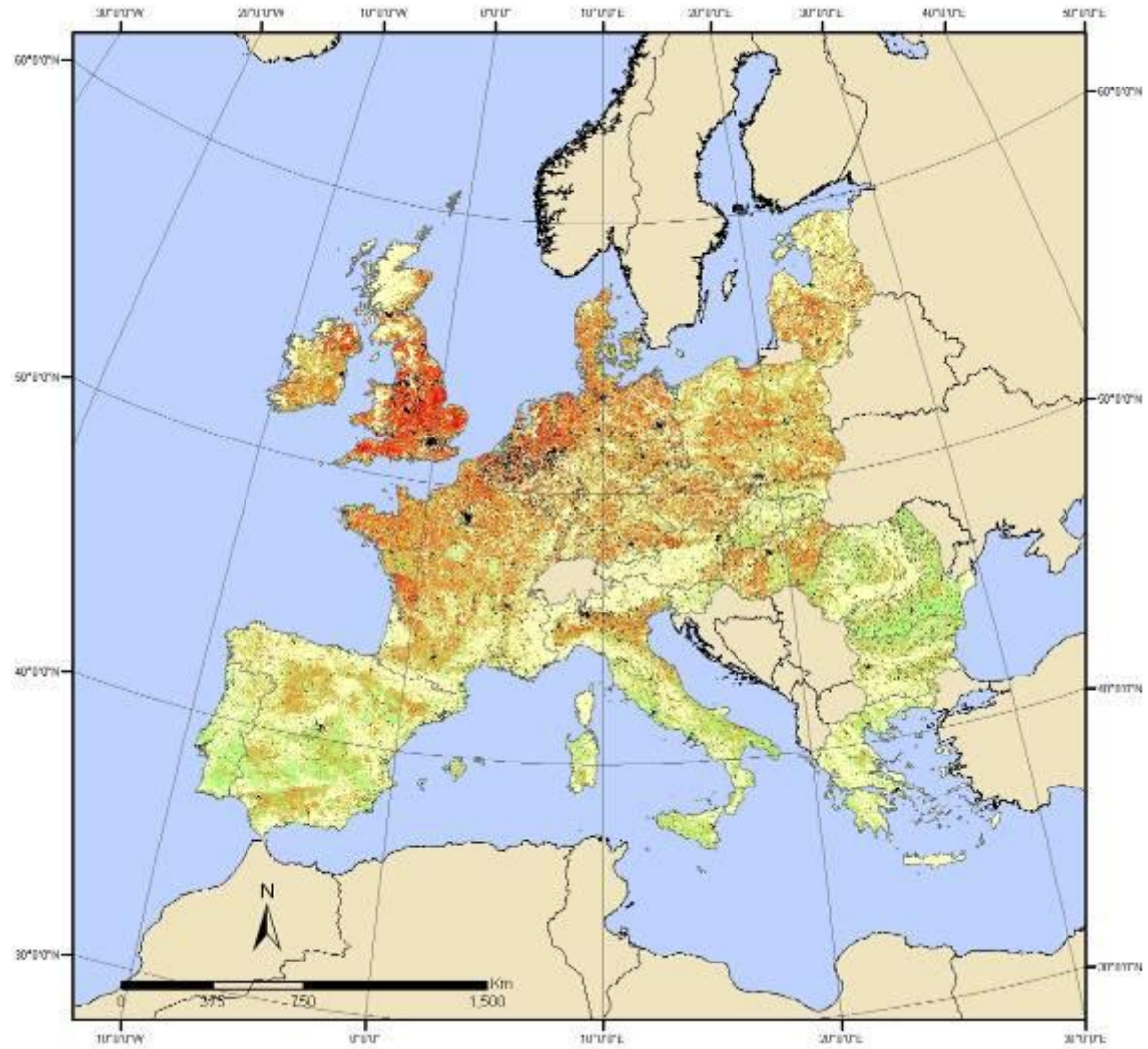
Source: JRC (2012)



Soil biodiversity



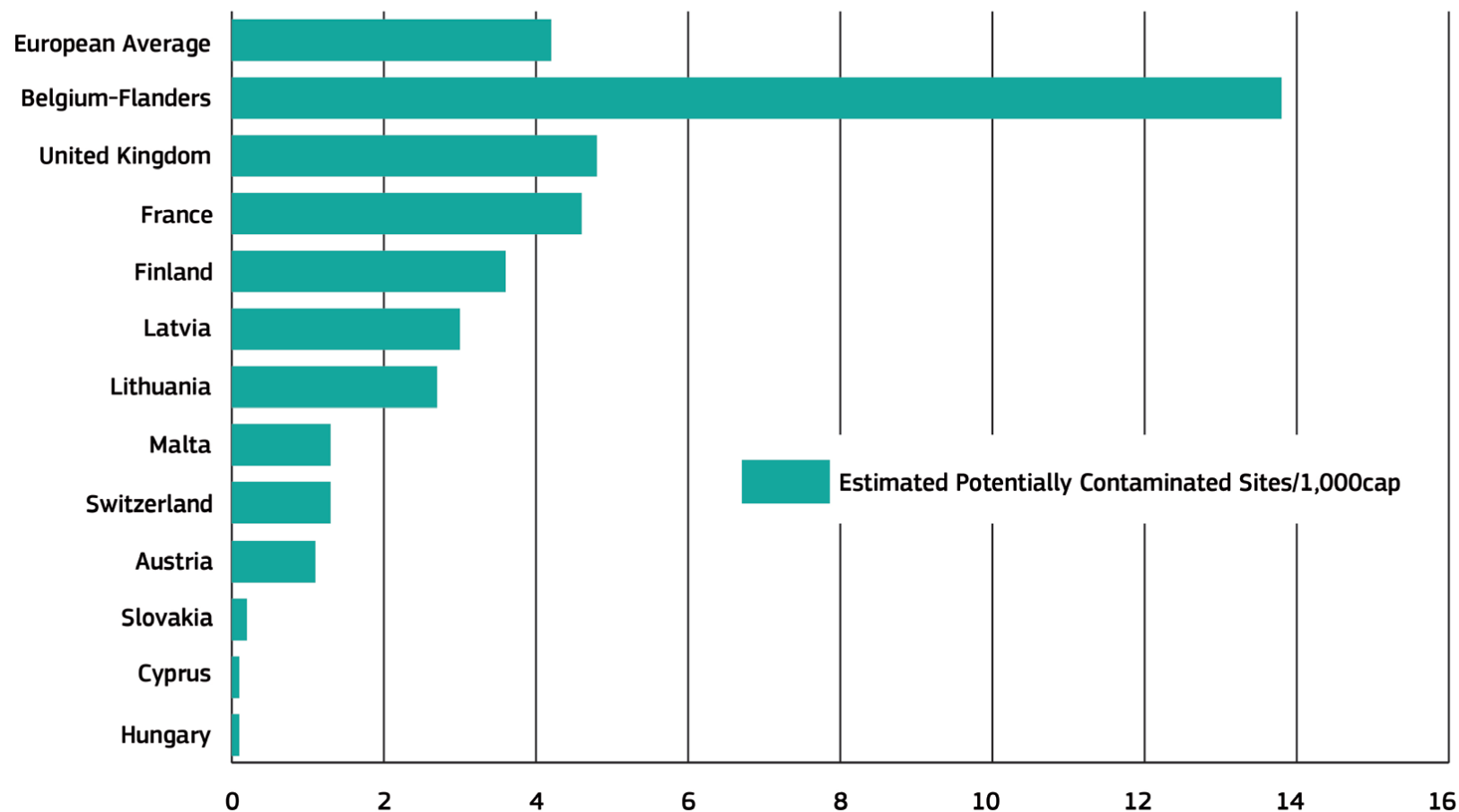
An indicator-based map prepared by the JRC shows a preliminary assessment of **where soil biodiversity is threatened**. This includes areas of high population density and/or intense agricultural activity (e.g. cereals and industrial crops, animal husbandry, greenhouses, fruit orchards, vineyards and horticulture).



Soil contamination



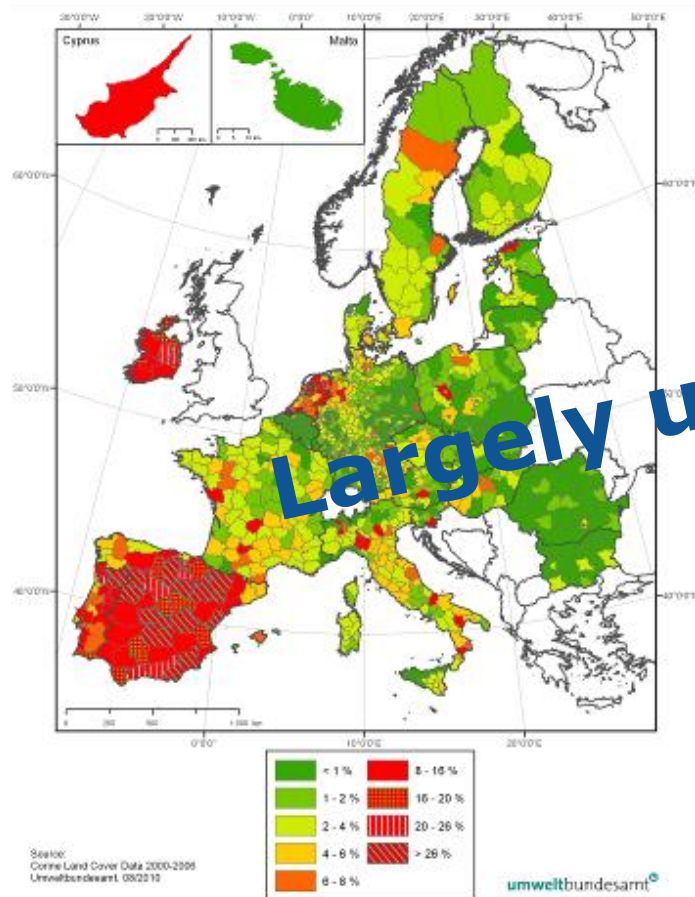
Estimated Potentially Contaminated Sites /1,000cap



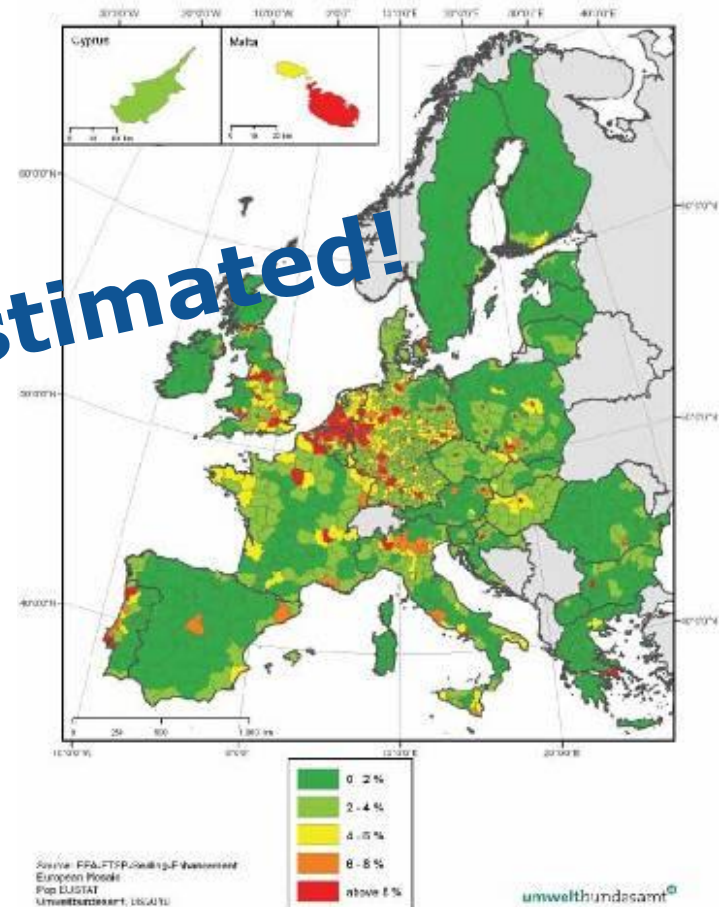
Source: Progress in the management of contaminated sites (JRC, 2014)

Soil sealing

Land take per administrative unit in the
period 2000-2006



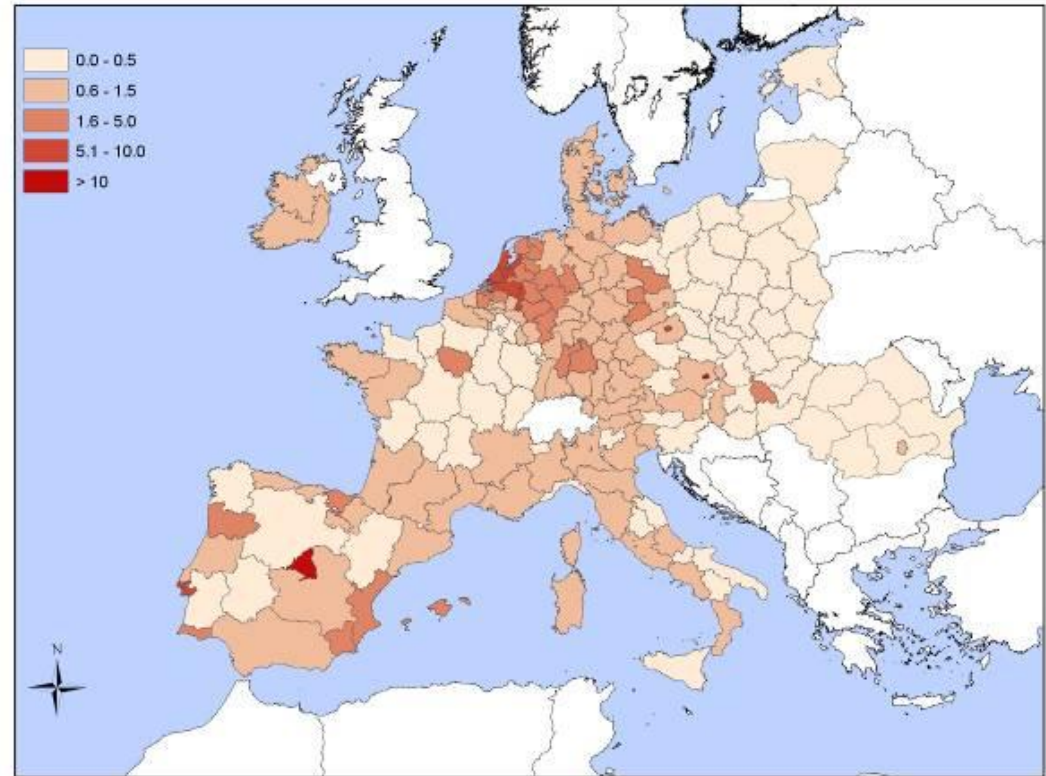
Soil sealed surface in 2006



Impacts of soil degradation (2)



Between 1990 and 2006, a potential agricultural production capability equivalent to a total of **6.1 million tonnes** of wheat has been lost in 19 MSs, with large regional variations.



This is a loss of almost 5% of the average annual European wheat production within a short time-span

Why soil protection at EU level (1)



- ❖ Soil is a **non-renewable** natural resource
- ❖ It performs **crucial** ecological, social and economic functions
- ❖ Soils are being **increasingly degraded** or **irreversibly lost** across the EU
- ❖ Estimated costs of soil degradation reach up to **€38bn per year** (SEC(2006)620)

Why soil protection at EU level (2)



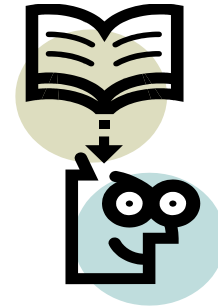
- ❖ A **common** problem requires a **common** solution – which doesn't mean advocating for a one-fits-all approach!
- ❖ Article 191 TFEU requires a high level of protection **across the Union**
- ❖ A lot of legislation at National and subnational level but...
- ❖ Only two or three MSs have a **comprehensive** legislation on soil protection
- ❖ **Trans-boundary** impacts and internal market issues

The Soil Thematic Strategy and the Soil Framework Directive proposal

The Soil Thematic Strategy

Communication

COM(2006)231, 22.9.2006



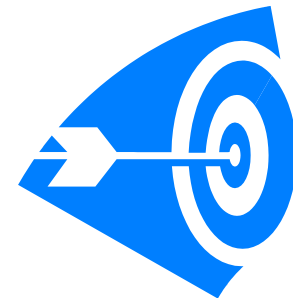
Proposal for a Soil Framework Directive

COM(2006)232, 22.9.2006



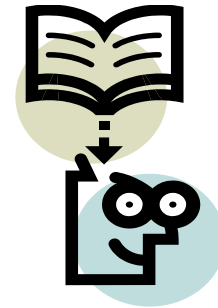
Impact Assessment

SEC(2006)1165 & SEC(2006)620, 22.9.2006



Communication

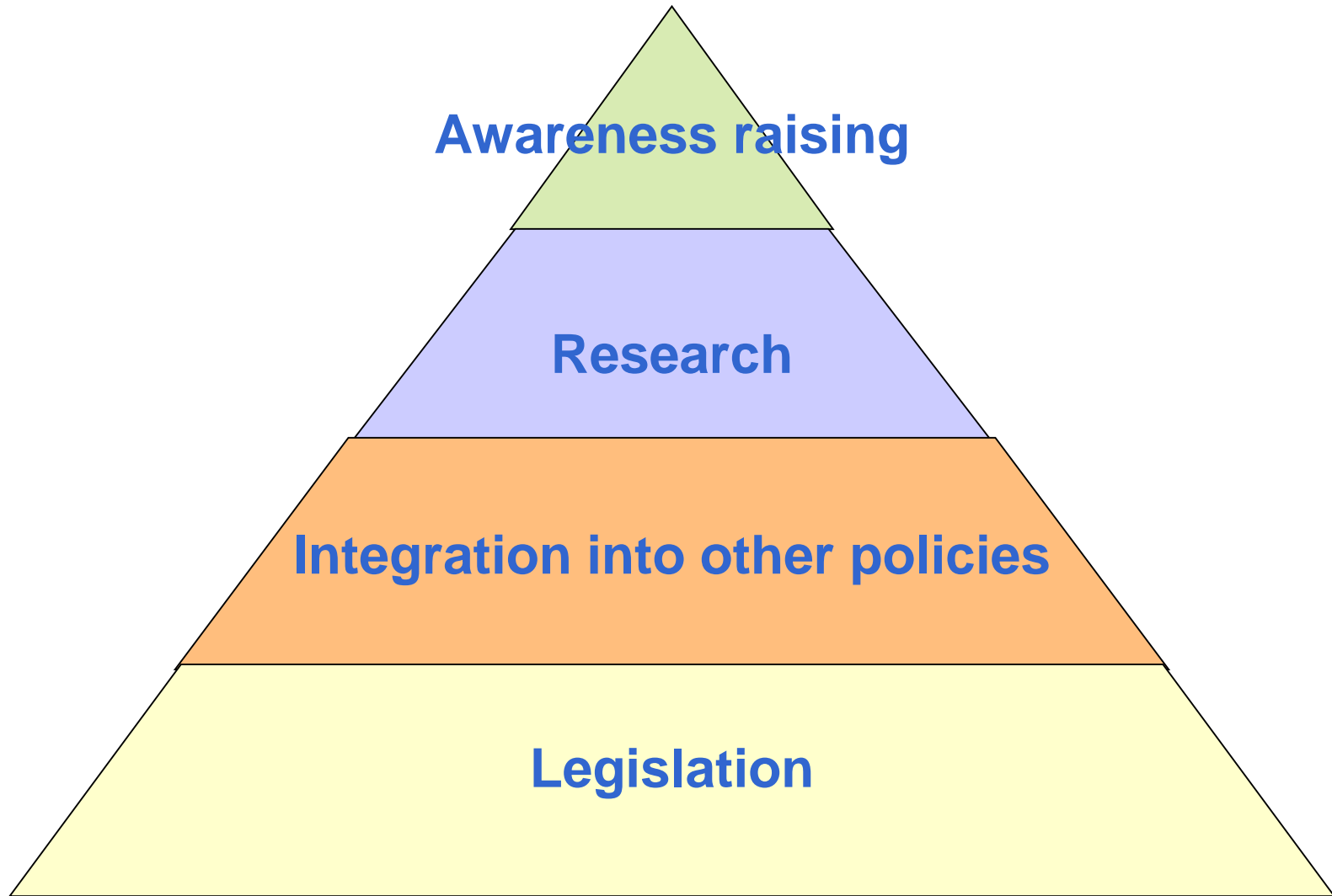
COM(2006)231, 22.9.2006





- ❖ Overall objective is the protection of **soil functions** and **sustainable use** of soil, based on the following guiding principles:
 - ❖ Prevention of soil degradation
 - ❖ Restoration of degraded soils
- ❖ Sets out the **four pillars** of EU soil policy
- ❖ To be implemented by MS
- ❖ 2012 Report from the Commission on the implementation of the STS COM(2012)46

The four pillars of the Soil Thematic Strategy



Soil threats considered:



Sealing



Erosion



Organic matter decline



Compaction

Salinisation+Acidification



Landslides



Contamination



Proposal for a Soil Framework Directive

COM(2006)232, 22.9.2006



The structure of the proposal for a Soil Framework Directive, COM(2006) 232



Objective: Protection of soil functions

- Integration in sectoral policies
- Precautionary measures
- Prevention of contamination
- Measures to limit or mitigate sealing

- Identification of **priority areas** for erosion, organic matter decline, compaction, salinisation, acidification, and landslides in 5 years
- Identification of **contaminated sites** in 25 years

- Programme of Measures
- National Remediation Strategy

What has happened to the proposal for a Soil Framework Directive?



- ❖ **The European Parliament adopted its first reading opinion on 14 November 2007** and the Committee of Regions and the Economic and Social Committee delivered their opinion on 13/02/2007 and 25/04/2007
- ❖ In the Council the proposal was repeatedly discussed but always ran into a **blocking minority of 5 Member States (AT, DE, FR, NL and UK)**
- ❖ *The Commission noted that the proposal **has been pending for 8 years** during which time no effective action has resulted, and decided to withdraw the proposal.*
- ❖ **Withdrawal Decision, OJ C 163, 28.5.2014:**
"The Commission remains committed to the objective of the protection of soil and will examine options on how to best achieve this. Any further initiative in this respect will however have to be considered by the next college".

**Proposal for a Soil Framework Directive,
COM(2006) 232**

What next?

Rio+20: 'The future we want' (June 2012)

205. We [the Heads of State and Government and high-level representatives] recognize **the economic and social significance of good land management, including soil**, particularly its contribution to economic growth, biodiversity, sustainable agriculture and food security, eradicating poverty, the empowerment of women, addressing climate change and improving water availability. (...)

206. We recognize the need for urgent action to reverse land degradation. In view of this, **we will strive to achieve a land-degradation neutral world in the context of sustainable development**. This should act to catalyse financial resources from a range of public and private sources.

COM(2012) 710, 29.11.2012

Priority objective 1:
To protect, conserve and enhance the EU's natural capital

- (23) To reduce the most significant man-made pressures on land, soil and other ecosystems in Europe, action will be taken to ensure that decisions relating to land use at all relevant levels give proper consideration to environmental as well as social and economic impacts. The Rio+20 Summit outcome called for a 'land degradation neutral world'. The EU and Member States should reflect on how best to make such a commitment operational within their respective competencies as well as to address soil quality issues within **a binding legal framework** (COM(2006) 232). Targets will also be set for sustainable land use and soil.
- (26) In order to protect, conserve and enhance the EU's natural capital, the programme shall ensure that by 2020: (e) Land is managed sustainably in the EU, soil is adequately protected and the remediation of contaminated sites is well underway.
- This **requires**, in particular: (e) **Increasing efforts to reduce soil erosion and increase soil organic matter, to remediate contaminated sites and to enhance the integration of land use aspects** into coordinated decision-making involving all relevant levels of government, supported by the **adoption of targets on soil and on land** as a resource, and land planning objectives.

Reference material



EC report on the implementation of the Soil Thematic Strategy and ongoing activities

COM(2012) 46, 13.2.2012

http://ec.europa.eu/environment/soil/three_en.htm

JRC report on 'The state of soils in Europe'

EUR 25186 EN, February 2012

[http://ec.europa.eu/dgs/jrc/downloads/
jrc_reference_report_2012_02_soil.pdf](http://ec.europa.eu/dgs/jrc/downloads/jrc_reference_report_2012_02_soil.pdf)

Soils in general

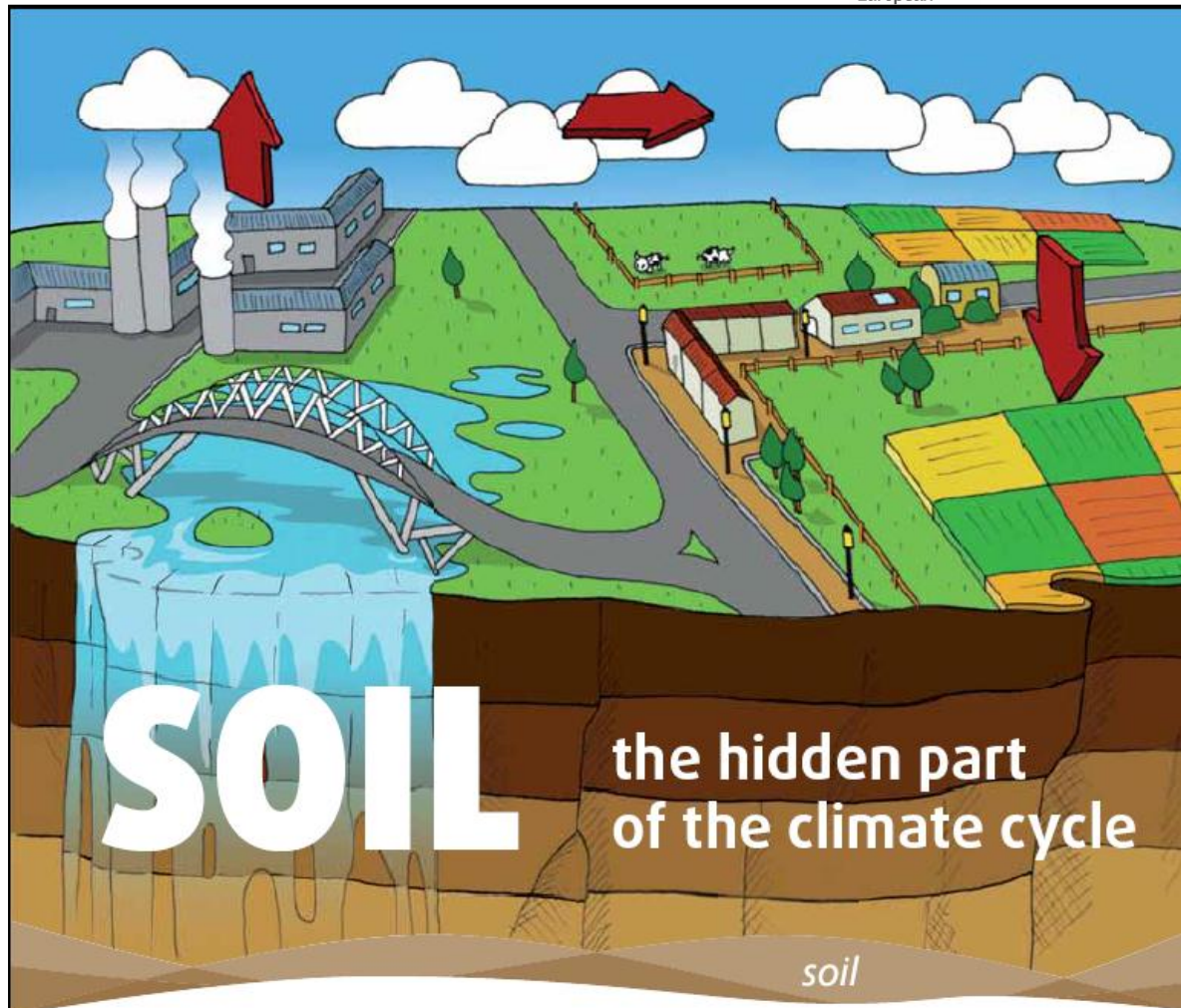


SOIL ATLAS OF EUROPE



[http://eusoils.jrc.ec.europa.eu/
projects/soil_atlas/download.cfm](http://eusoils.jrc.ec.europa.eu/projects/soil_atlas/download.cfm)

Soil & climate change



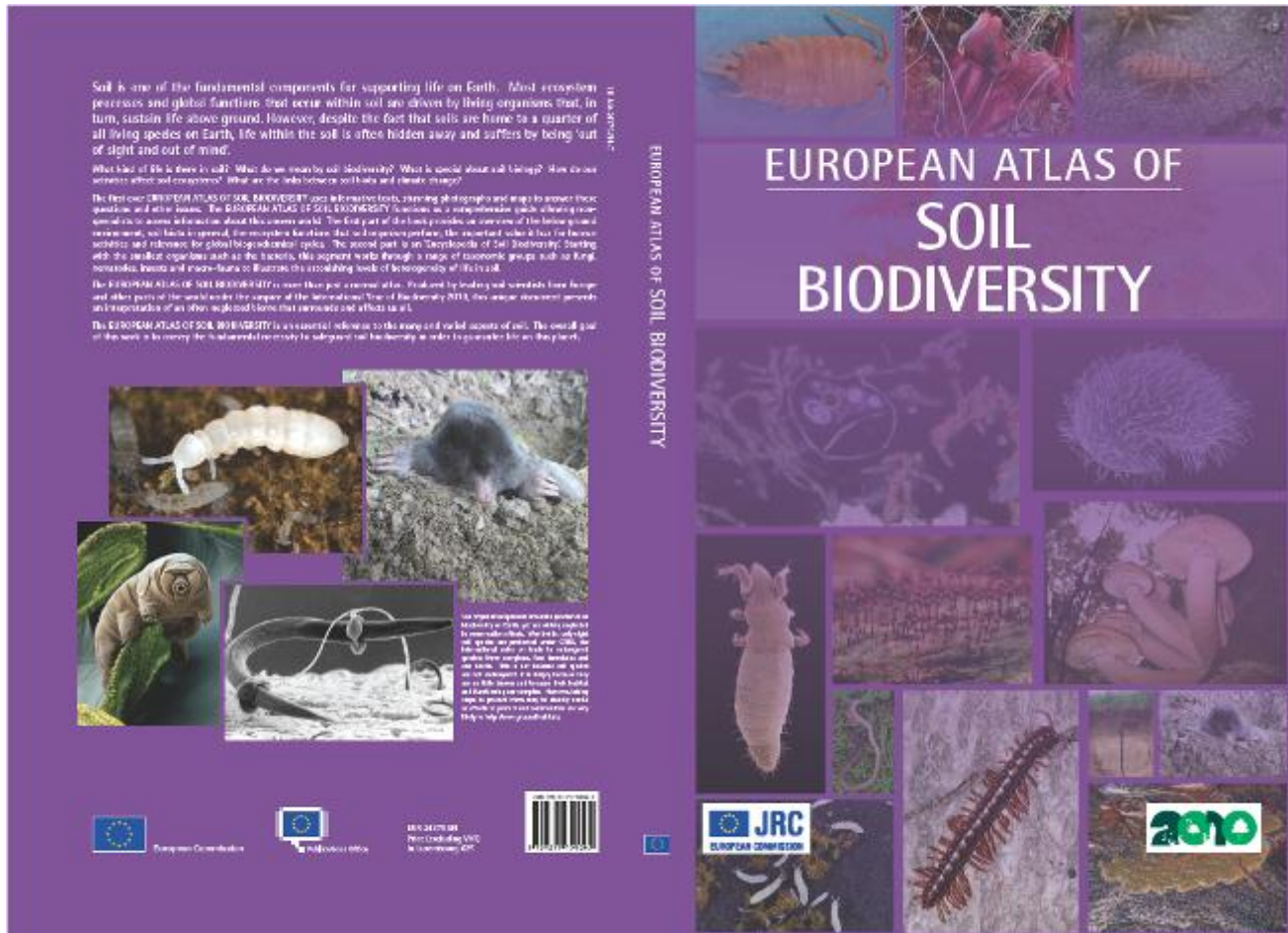
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environment/soil/
publications_en.htm](http://ec.europa.eu/environment/soil/publications_en.htm)



Soil & biodiversity

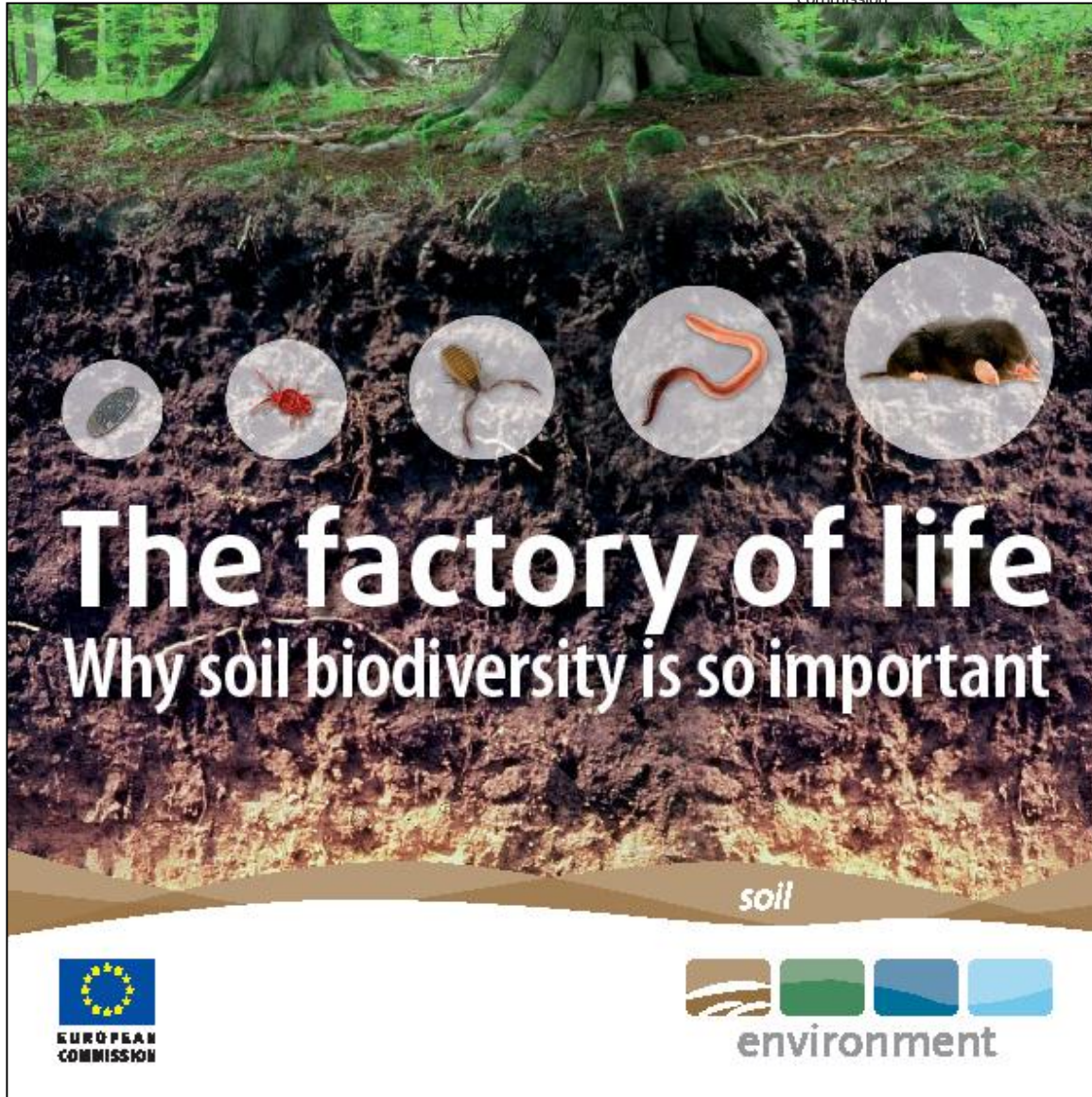


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http://eusoils.jrc.ec.europa.eu/library/maps/biodiversity_atlas/

Soil & biodiversity



[http://ec.europa.eu/
environment/soil/
publications_en.htm](http://ec.europa.eu/environment/soil/publications_en.htm)

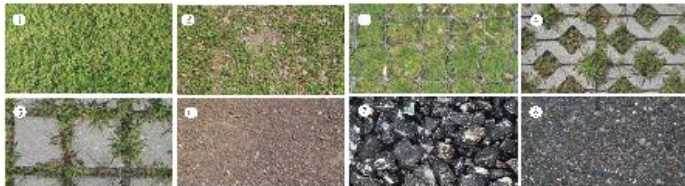
Soil sealing



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AGENCY AUSTRIA **umweltbundesamt**^U

FINAL REPORT



Overview of best practices for limiting soil sealing or mitigating its effects in EU-27

Project co-ordination: Luca Marmo and Thomas Strassburger
European Commission – DG Environment

Authors: Gundula Prokop, Heide Jobstmann and Arnulf Schönbauer
Environment Agency Austria

April 11, 2011

Overview of best
practices for limiting
soil sealing or
mitigating its effects
in EU-27

[http://ec.europa.eu/
environment/soil/
publications_en.htm](http://ec.europa.eu/environment/soil/publications_en.htm)

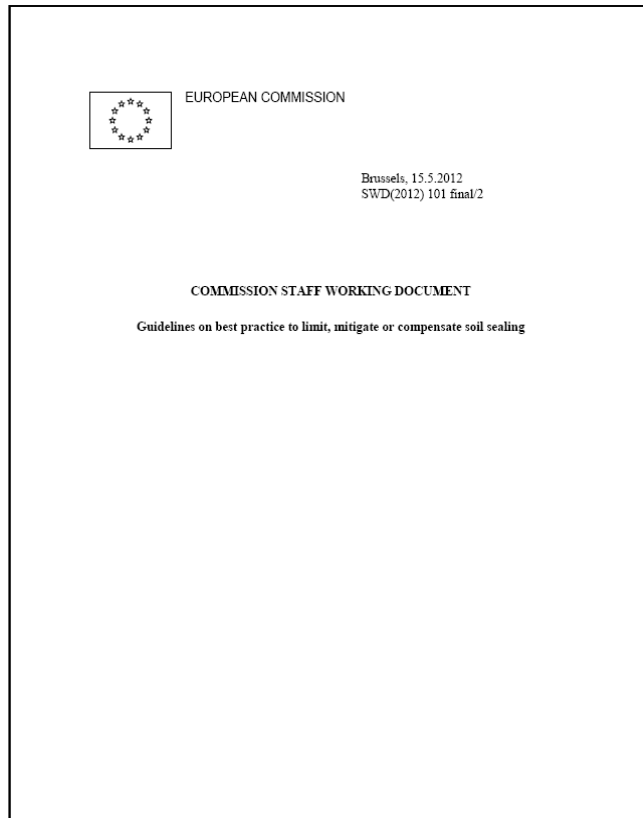
Soil sealing



Guidelines on best practice to limit, mitigate or compensate soil sealing

SWD(2012) 101 final/2, 15 May 2012

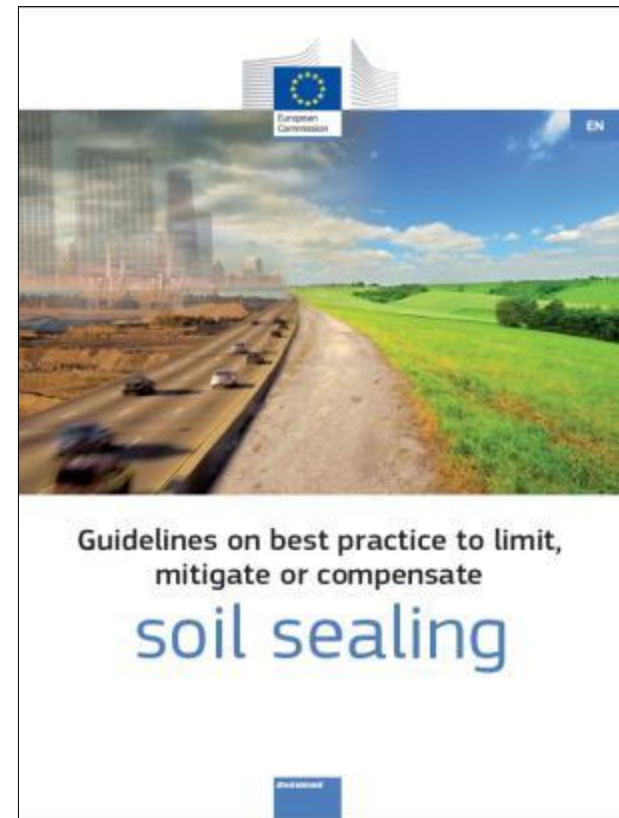
http://ec.europa.eu/environment/soil/sealing_guidelines.htm



Available
in all EU
official
languages



Available
in selected
EU official
languages



Thank you for your attention!

2015

International
Year of Soils



<http://ec.europa.eu/environment/soil/index.htm>