

US EPA ARCHIVE DOCUMENT

Soils Policy: EU Soil Thematic Strategy

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Soil degradation has serious consequences detrimental for example to water quality and quantity, human health, climate change, biodiversity, and food safety. The European Commission (EU) adopted a [Soil Thematic Strategy](#) (COM(2006) 231)) on September 22, 2006, in order to provide a comprehensive common framework for protecting soils across the European Union from these and other harms. The Strategy consists of: a communication that establishes a ten-year work program; a draft framework directive; and an impact assessment analyzing the economic, social, and environmental impacts of the proposed measures. The EU Soil Thematic Strategy is the last of [seven thematic strategies](#) developed under the EU's 6th Environmental Action Program. This fact sheet briefly describes the Soil Thematic Strategy and related policy developments in several countries, including the US. The fact sheet is not comprehensive; rather, it provides a starting point for readers interested in investigating the topic.

EU Soil Thematic Strategy

Soil in Europe

Formed by mineral particles, organic matter, water, air, and living organisms, soil is an extremely complex living medium. Three hundred twenty major soil types have been identified in Europe. Soil performs many vital environmental, economic, social, and cultural functions - including food and other biomass production and storage, as well as filtration and transformation of water, carbon, and nitrogen. Soil also is the source of many raw materials for commerce. Soil degradation, caused by contamination, erosion, loss of organic matter, salinization, and other threats, has serious and long-term consequences for human health, natural ecosystems, and the economy. In 2006, the EU estimated that 3.5 million sites within the EU could be contaminated, that 45% of European soils (principally in southern Europe) have low organic matter, and that over 10% of European soils are subject to erosion.

The EU Soil Thematic Strategy

The EU has determined that protecting soil requires an holistic approach to soil management. The EU Soil Thematic Strategy includes: a proposed legislative framework for the protection and sustainable use of soil, in order to integrate soil protection into national and EU policies; measures to improve knowledge of soil functions; and measures to increase public awareness. It seeks to establish rational land use planning practices at all levels of government to ensure the sustainability of soils, consistent with a "precautionary principle" used by the EU in establishing environmental policy.

The proposed EU soil framework directive, designed so that Member States may adopt measures tailored to local needs, establishes common principles, objectives, and actions to guide land use planning and management and requires that Member States adopt a systematic approach to identifying and combating soil degradation. Member States also must integrate soil protection into other policies - especially with respect to agriculture, regional development, transport, and research. Member States must identify areas at risk for erosion, organic matter decline, compaction, soil sealing, salinization, and landslides, as well as soils where these processes have occurred. Under the proposed directive, a soil status report provided by the seller or buyer to government and other parties in the transaction must accompany the sale of a potentially contaminated property. Member States must adopt programs to reduce these risks, inventorying contaminated sites and establishing national strategies for their remediation. Actions must include mechanisms to fund the clean up of orphaned sites and steps to rehabilitate brownfield sites.

Development and Implementation of the Strategy

The EU's 2006 Soil Strategy was preceded by an April 2002 Communication titled, "Towards a Thematic Strategy for Soil Protection" (COM(2002)179) and a comprehensive public consultation process beginning in February 2003. An Advisory Forum and five working groups produced [six reports](#) to support the work, and the European Community also launched an internet consultation process in 2005. Parallel to the legislative process, the EU's [Joint Research Centre](#) conducts important data collection initiatives to characterize soils in Europe. Also, [NICOLE](#) (Network for Industrially Contaminated Land in Europe) is an independent European forum set up in 1995 to foster cooperation by industry, service providers, and academia in addressing contaminated land management issues.



The draft EU Soil Directive has not been finalized. In November 2007, the European Parliament did reaffirm its support for public soil inventories, a list of potentially contaminated sites, and the requirement that Member States establish soil remediation strategies. Supporters of the directive have argued that a soil directive is important to help fight climate change because of the role soil plays as a carbon repository. Environment ministers from the UK, Germany, Austria, in particular, however, have taken the position that the directive would interfere with existing Member State soil management measures and that it would be too costly to justify its environmental benefits.

Further Information

For further background information on the 2006 Soil Strategy, its development, and related policy, see:

- [2006 EU Soil Strategy press release](#)
- [2009 EU press release on soils and climate change](#)
- [1991 EU Sewage Sludge Directive](#)
- [1991 EU Nitrates Directive](#)
- [EU Common Agricultural Policy](#)
- [Summary of EU legislation related to soils](#)
- [EU European Soil Portal](#) (data on European soils)
- [EC EUGRIS portal](#) (data on topics related to water and soil)

Country Examples

A number of EU Member States have legislation specific to soil protection. Much of this legislation focuses on soil contamination. Countries whose policies address a broader range of soil protection issues include:

Netherlands. Dutch soil policy addresses the long-term protection, management, and sustainable use of soil in the Netherlands. Under the guidance of the Netherlands Ministry of Housing, Spatial Planning and the Environment (VROM) and other agencies, actions have been taken both to prevent pollution and to clean up contamination in soils at approximately 60,000 sites. The 1987 Dutch Soil Protection Act (revised in 2008), as well as implementing [regulations and decrees](#), provides a basis for Dutch soil policy. The 2003 VROM Soil Policy Letter articulates an integrated and sustainable approach to soils that

incorporates considerations related to land use planning, land conservation, water management, and agriculture. The [2006 Soil Remediation Circular](#) (as amended in 2008) establishes remediation objectives and describes soil remediation requirements.

Germany. German government policy recognizes the importance of soils in agriculture, the role soil protection plays in safeguarding other environmental media, and the importance of soil in fighting climate change. Together, the 1998 Federal Soil Protection Act and the [1999 Federal Soil Protection and Contaminated Sites Ordinance](#) address soil protection and soil remediation and provide the basis for soil policy in Germany. The latter governs regulations for the examination and assessment of potentially hazardous sites, admissible remediation methods, and remediation planning. About 275,000 sites are suspected of being contaminated in Germany. Under the “polluter pays” principle, the person causing the contamination is held responsible for clean up under German law. The Federal Environment Agency [Soil Protection Commission \(KBU\)](#) was established in 2004 to support the Federal Environmental Agency in raising public awareness of soil issues and create the groundwork for strengthened soil protection policies. The KBU’s work focuses on renewable organic resources and soil quality, pollutants and soils, and soil protection and soil awareness. The [Federal Institute for Geosciences and Natural Resources](#) conducts research on sustainable soil uses.

Scotland. The [2008 Scottish Soils Framework](#) is a first step designed to achieve protection of Scotland’s soils from pollution and climate change by establishing a coherent soil protection policy and promoting activities that support good soil management, public awareness, and planning to protect soils. The Framework emphasizes integration of soil protection into other policies at the national and local levels. Specific [recommendations](#) of the Framework include the development of a soil monitoring network, as well as forest carbon standards and climate change guidelines to address soil-derived greenhouse gas emissions. Scotland’s [Environmental Protection Act of 1990](#) (as amended) establishes a “suitable for use” risk-based approach for clean up of land contaminated by chemicals. The law makes local authorities responsible for inspecting and identifying contaminated land and for taking take action to secure its remediation using the “polluter pays” principle.

Some U.S. Activities and Additional Resources

No comprehensive soils protection strategy exists in the United State. Programs and policies that address soils in the United States are administered by a number of Federal and State authorities and focus on a range of land management goals, such as contaminated land, agriculture, forest management, or watershed protection. As in Europe, responsibility for land use planning lies primarily with local authorities.

Environmental Protection Agency

The US Environmental Protection Agency (EPA) is the federal agency primarily responsible for implementing federal law to remediate contaminated land. The most contaminated properties generally are covered under the [Comprehensive Emergency Response, and Compensation Act \(CERCLA\)](#). The [Resource Recovery and Compensation Act \(RCRA\)](#) addresses clean up at facilities that treat, store, or dispose of hazardous waste. The Small Business Liability Relief and [Brownfields Revitalization Act](#) is designed to address the clean up and revitalization of properties whose use is complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Other useful EPA web resources that provide information on US policy for soil contamination include:

- [Superfund laws, policy and guidance](#)
- [Superfund soil screening guidance](#)
- [RCRA corrective action program](#)

- [Brownfields program](#)

Department of Agriculture

Important programs in the US Department of Agriculture (USDA) that influence US policy for soil protection and use include the [Natural Resources Conservation Service \(NRCS\)](#). NRCS makes available extensive [soil use information](#) to support agriculture and forestry. For example, the [Web Soil Survey \(WSS\)](#) provides extensive soil data, while other [NRCS conservation programs](#) address a wide range of topics relevant to soil conservation. **USDA's Economic Research Service (ERS) conducts [important conservation research](#)** related to land use and soils. The [National Soil Erosion Research Lab](#), within ERS, is a focal point for the US Government's national research program on soil erosion.

State Activities

US States have important roles in protecting soil and encouraging its sustainable use, often through the conservation of soil and water conservation districts. For example:

- [Minnesota Board of Water and Soil Resources](#). **Minnesota's administrative agency** responsible for soil conservation, the Board manages 91 soil and water conservation districts, 46 watershed districts, and 23 metropolitan watershed management organizations.
- [Louisiana Soil & Water Conservation Commission](#). The Department is responsible for State policy on soil and water conservation.
- [North Carolina Division of Soil and Water Conservation](#). The Division provides programs, technical services, and educational outreach to promote voluntary natural resource management and conservation on private lands in the State.