Introduction

The Department of Environmental and Planning Law at the Helmholtz Centre for Environmental Research – UFZ in Leipzig has been in existence since 2004, having emerged from the working group Environmental Law that was set up at the UFZ in 2001. As a non-university institution embedded within a research centre focused on the natural sciences, the department occupies a unique position among Germany’s research and academic institutions specializing in environmental law. In keeping with the UFZ’s motto “Research for the Environment” our department is working for a law which protects our environment effectively while ensuring the sustainable use of its resources. By explicitly incorporating knowledge from the social sciences and by working closely with research groups from the natural and social sciences on integrated projects, the department is breaking new ground, also at the conceptual level. The aim of this brochure is to give all those interested in environmental law, both in science and in practice, a concise overview of our work. For more detailed and up-to-date information on the department’s projects and publications, visit our website at www.ufz.de/upr.

Prof. Dr. Wolfgang Köck, Head of the Department
The department is located at the UFZ headquarters, Permoserstraße 15, Leipzig
Helmholtz Centre for Environmental Research – UFZ

As an international competence centre for systemic, interdisciplinary environmental research, the UFZ investigates the complex interactions between humans and nature under the influence of global change. Current research topics include water resources management, the impacts of land-use changes on biodiversity, the effects of chemicals on the environment and human health, and the development of strategies and measures for climate change mitigation and adaptation. The UFZ aims to develop solutions to environmental problems caused by human activities and contribute to the long-term sustainability of our natural resources. Sustainable management of complex environmental systems is the focal point of our work. To this end, researchers at the UFZ are engaged in an interdisciplinary dialogue between the natural and the human sciences while also involving decision-makers and stakeholders from private economy, politics and the public in the research process.

The UFZ was founded in 1991. Ninety percent of its funding comes from the Federal Ministry for Education and Research, with a further five percent being funded by the Federal State of Saxony and the remaining five percent by the Federal State of Saxony-Anhalt. There are around 1,000 employees working at its locations in Leipzig, Halle (Saale) and Magdeburg. At the UFZ, research is organised according to thematic focus into seven divisions, to which 34 largely discipline-based departments are assigned.

The UFZ is a member of the Helmholtz Association, whose centres actively pursue strategic research programmes in six core fields: Energy; Earth and Environment; Health; Key Technologies; Structure of Matter; and Aeronautics, Space and Transport. With more than 32,500 employees in 18 research centres, the Helmholtz Association is Germany’s largest scientific organisation. Its work follows in the tradition of the natural scientist Hermann von Helmholtz (1821-1894).
Department of Environmental and Planning Law

The Department of Environmental and Planning Law forms part of the division of social sciences, together with the departments of Economics, Urban and Environmental Sociology and Environmental Politics. The department pools expertise in jurisprudence at the UFZ and is concerned with the legal handling of environmental issues. Our research focuses on the following fields of law, in each case with reference to constitutional law, European law and international law and taking into account the basic principles of legal and social theory:

- Basic Principles of Environmental Law
- Spatial Planning and Urban Development Law
- Climate Protection and Environmental Energy Law
- Water Management and Water Resources Protection Law
- Nature Conservation and Agri-environmental Law
- Hazardous Substances Law

Research group for International and European Environmental Law

Environmental protection is in many respects a cross-border issue. This applies in particular to the great environmental policy challenges of our time - climate change mitigation, water conservation, species conservation and the “greening” of international trade. No significant advances can be made in these areas without international protection standards and mandatory forms of cooperation. Promoting the development of international environmental law and – in Europe – EU environmental law is therefore of key importance, and contributing to this is the aim of the newly established research group for international and European environmental law at the Department of Environmental and Planning Law. In addition to general questions of international environmental law and European environmental law, the research group addresses above all the areas of climate change mitigation and adaptation, water management and the protection of natural resources. The group participates in international projects, is actively engaged in various international and European networks of experts, and currently organises and supervises the European Environmental Law Forum (EELF).
**Departmental Staff**

The department currently employs four senior and three junior researcher, seven PhD candidates and several student assistants, in addition to the head of the department and the secretary.

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**Prof. Dr. iur. Wolfgang Köck (Head of the Department)**

Prof. Köck studied at the University of Bremen, graduating in 1990 after writing his PhD thesis in the field of public finance law on special charges as an instrument of environmental protection. After working in Bremen and following a research stay at the Centre for Interdisciplinary Research (ZiF) at the University of Bielefeld he qualified as a professor in 2000 at the University of Bremen with a monograph on standards of risk assessment in environmental law from. In 2001 Prof. Köck was jointly appointed as professor by the University of Leipzig and the UFZ for the newly established Chair in Environmental Law in the university’s Faculty of Law. At the same time he became head of the working group Environmental Law and Institutions at the UFZ. He has been head of the Department of Environmental and Planning Law since 2004.

Prof. Köck is co-publisher and chief editor of the journal Zeitschrift für Umweltrecht (ZUR) and editor of the Journal for European Environmental & Planning Law (JEEPL). He is also on the board of the Institute for Environmental and Planning Law in the Faculty of Law at the University of Leipzig. His main research interests cover environmental and planning law as well as the fundamentals of environmental law.
Dr. iur. Jana Bovet (Deputy Head of the Department) is senior researcher and at the department since 2002. Prior to that she worked as a researcher at the Leibniz Institute of Ecological and Regional Development in Dresden (IOER) and obtained her doctorate from the University of Leipzig with a thesis on remediation and development as a regional planning task. Her main fields of research at the UFZ are spatial planning law and environmental energy law, in both cases with reference to the solution approaches adopted by selected countries. Thematically, Bovet is working on instruments for reducing land use and on the legal aspects of spatial planning and land use for renewable energies, especially wind energy. Her research also focuses on energy network planning, the design of procedural law and the organisation of public participation as well as questions related to the allocation of the costs of network expansion.

Dr. iur. Moritz Reese (leader of the research group International and European Environmental Law) joined the department in 2008 as a senior researcher. His main research interests are European environmental law, climate protection and water management law, as well as the law on infrastructure and waste management. Before joining the UFZ, he worked as a researcher at the University of Hamburg where, in 2000, he earned his PhD with a thesis on closed-loop cycles in integrated environmental law, awarded by the Gesellschaft für Umweltrecht. From 2001 to 2005 Reese worked as a coordinating researcher at the German Advisory Council for the Environment (SRU). At present, he is preparing to qualify as a professor with a work on autonomy-preserving legislation in the European multi-level law-making system. Reese is editor-in-chief of the Journal for European Environmental & Planning Law (JEEPL) and a long-serving member of the board of editors of the journal Zeitschrift für Umweltrecht.
Dr. iur. Katharina Kern has been a researcher at the department since 2004. She wrote her PhD thesis on the legal regulation of environmental risks from human and veterinary pharmaceuticals, in which she analysed the European and national marketing authorisation law for human and veterinary pharmaceuticals. Her thesis won three awards - the award for monographs from the Gesellschaft für Umweltrecht (environmental law association) in 2009, the Körber Foundation’s award for dissertations in 2010, and the Feldbausch Foundation’s science award in 2010. Kern’s research focuses on European and national law on hazardous substances (laws on chemicals, pharmaceuticals, cosmetics, pesticides and fertilisers, and biocides) as well as water management and water resources protection law, environmental charges, and the principles of environmental law.

Dr. iur. Grit Ludwig studied Law in Leipzig and was awarded her PhD in 2005 by the University of Leipzig with a thesis on the impacts of the Habitats Directive on mining projects under the German Mining Act. Her thesis was supported by the doctoral scholarship programme of the Deutsche Bundesstiftung Umwelt (German Federal Foundation for the Environment) and won the Feldbausch Foundation’s science award in 2004. In 2008, after working as a barrister and as a development worker in Mozambique, Ludwig joined the department as a postdoctoral research fellow. Her work deals with the legal aspects of bioenergy use and international forest conservation as well as mining law and subsurface spatial planning.
Bjørn-Oliver Magsig, LL.M. with distinction, joined the department as a research fellow in 2012. Prior to that he worked as a consultant on a number of projects in the field of international water research at the UNESCO Centre for Water Law, Policy and Science in Dundee, Scotland, where he wrote his doctoral thesis on “International Water Law and the Quest for Common Security”. Magsig has also researched and taught on general international environmental law issues and international environmental policy. He earned his Master of Laws in Environmental Law at the Centre for Energy, Petroleum and Mineral Law and Policy in Dundee, UK, in 2008. His main research interests include the principles of public international law, international water law as well as natural resources and international security. Since 2008, he has been a member of the IUCN Commission on Environmental Law, Specialist Group on Water and Wetlands.

Dr. iur. Stefan Möckel has been working as a researcher at the department since 2006. He studied Law in Leipzig and Vigo (Spain). Möckel received his doctorate from the University of Leipzig in 2005 with a thesis on environmental taxes for the ecologisation of agriculture, which was supported by the German Federal Foundation for the Environment. Since finishing his legal clerkship, his work at the department has focussed on the legal aspects of nature and landscape conservation as well as on the laws on soil conservation and the protection of water resources. Möckel is an expert on the environmental laws related to these fields as well as on the legislation governing the agriculture and forestry sector. He is deputy head of the working group on Nature Conservation and Biodiversity in the Division of Social Sciences. He was appointed to the editorial board of the journal Zeitschrift für Umweltrecht (ZUR) in 2013.
Other Members of the Department

The department supervises doctoral theses on a wide range of environmental law topics. We also take on student research assistants and offer internships. The following PhD candidates are currently working in the department:

**Romina Luz Schaller-Hermoza Cacsire, LL.M. Eur.** has been conducting research for her PhD on “Climate protection through forest conservation – national and international legal instruments with a focus on the REDD+ mechanism based on the example of Peru” at the UFZ since 2011. Her work is supported by a scholarship from the German Federal Foundation for the Environment. She studied Law and Political Science at the San Marcos University in Lima, Peru, and European Law at the University of Leipzig.

**Ruby Moynihan** joined the department in 2012 as a research associate focusing on international and European environmental and water law. She is currently doing a PhD in collaboration with the University of Edinburgh (UK) on “Strengthening cross-sectoral and multi-level coherence and non-state actor legitimacy in international water law”. Previously she worked at the UNESCO Centre for Water Law, Policy & Science (UK) and as an environmental lawyer in New Zealand. She is a member of the IUCN Commission on Environmental Law.

**Ass. iur. Theodor Lühr, Diploma administration (FH),** has been working at the department since 2010 and since November 2012 as a research, associate. His doctoral thesis examines public participation as an instrument for increasing the acceptance of large-scale projects based on the example of the planning of transmission lines in Germany. He studied Public Administration at the University of Applied Sciences for Public Administration in Kiel and Law at the University of Leipzig. He completed his legal clerkship at the District Court of Leipzig.
Ass. iur. Sebastian Hartig is currently completing his doctoral thesis on “Water Resources Management under the Influence of the EU Water Framework Directive: the Coordinated Approach in the Field of Water Management”. He has been working as a research associate at the department since 2010. Prior to that he studied Law at the University of Leipzig and completed his legal clerkship at the District Court of Leipzig.

Ass. iur. Vanessa Richarz studied Law at the European University Viadrina in Frankfurt (Oder) and at the University of Wales in Aberystwyth (UK). After completing her legal clerkship in Bremen she worked at the German Biomass Research Centre in Leipzig. She has been conducting research for her PhD thesis on “Spatially relevant bioenergy policy as a legal problem” at the Department of Bioenergy at the UFZ since January 2011. Her work is being supervised by the Department of Environmental and Planning Law.

Ref. iur. Sophie Binder studied Law with a focus on environment and economics at the University of Freiburg i.Br. Since 2013 she joined the department as a PhD candidate and where she is investigating the “Law on Land Consolidation Planning and Ecosystem Services”.

Ass. iur. Cornelius Tronicke joined the department as a doctoral candidate in October 2012 and is conducting research on “The Impacts of the Energy Network Expansion on the Protection of the Living Environment – Assessing Current Legal Concepts and Reform Perspectives”. He studied Law at the University of Leipzig and completed his legal clerkship at the District Court of Leipzig.
Research Fields

- Hazardous Substances Law
- Water Management and Water Resources Protection Law
- Climate Protection and Environmental Energy Law
- Nature Conservation and Agri-Environmental Law
- Basic Principles of Environmental Law
- Spatial Planning Law and Urban Development Law
Basic Principles of Environmental Law

The department is not only concerned with the various sectors of environmental law, it also makes contributions to its foundations, dealing with the general principles and the structure of international law, European law, German federal law and general administrative law. We also analyse the principles of environmental law and the normative concepts of sustainability as well as the precautionary or risk orientation of law. These are closely related to the institutional conditions of environmental policy and cross-cutting issues such as information, participation and legal protection.

Special attention is given to related disciplines. Social science approaches to law, such as the economic analysis of law, decision theory or governance theory as an extension of the theory of political steering are incorporated into our own research work.

Selected projects

• CLAIM: Legal aspects of sustainable landuse management (funded by the Federal Ministry for Education and Research – BMBF)
• Responsibility for Sustainability – Management of water resources in the EU (funded by the Federal Ministry for Education and Research – BMBF)
• Law of Sustainability – Sustainable Law: “Sustainable Development” as a legal term and indicators of a sustainable legal system (funded by the Federal Ministry for Education and Research – BMBF)
• General principles of environmental law
• Financial constitution and environmental protection instruments (taxes, charges, financial compensation)
• Environmental protection and environmental law principles in the Basic Law
**Spatial Planning Law and Urban Development Law**

German law is familiar with numerous planning instruments ranging from supra-regional spatial planning law to specific planning approval procedures to urban planning as well as landscape planning law, all of which serve to reconcile social, economic and ecological demands on space. These are the key instruments for coordinating land use.

Our research examines how aspects of environmental law within spatial planning and urban development influence the ratio of overall spatial planning to sectoral planning and the cooperation between different levels of decision-making to agree on and create binding decisions on land use. The research focuses on limiting new land use for housing and transportation, the control of land use for renewable energies, subsurface spatial planning, the coordination of urban planning and the development of infrastructure for urban water management, land use provisions for the protection of species and habitats, and the treatment of problems of climate change in the legislation on spatial planning and urban development.

**Selected projects**

- Integrated UFZ Urban Transformation project: Sustainable cities of the future – resource-efficient, livable and resilient
- InfraWass: Sustainability institutions for the governance of durable technical infrastructure systems using the example of the European water supply and waste water disposal under the conditions of climate and demographic change (funded by the Federal Ministry for Education and Research – BMBF)
- FORUM: Tradable land development certificates – technical preparation of a supra-regional test model (commissioned by the German Federal Environment Agency)
- Coordination of regionally effective policy (ARL federal working group)
- Planning the coordination of land use using renewable energies as an example
Climate Protection Law and Environmental Energy Law

Climate change is one of the greatest challenges of our time. The challenge is twofold – greenhouse gas emissions have to be reduced even more drastically (mitigation) and at the same time humans and the environment have to adapt increasingly to the consequences of global warming (adaptation). The department is conducting research in both of these topics. In the area of climate change mitigation, our research focuses mainly on: land-related aspects of renewable energies, planning control, the sustainable production of bioenergy and REDD+ as an international instrument for climate protection through forest conservation. In the area of climate change adaptation, the department is investigating whether existing environmental legislation can effectively meet these challenges and to what extent the law can enhance the resilience of the assets it protects. In the area of environmental energy law, the research focuses on regional planning law and the relevant procedural law. The emphasis here is on so-called network planning, i.e. planning processes for the expansion of the power grid, as well as the planning of wind energy as a key space-consuming technology in the field of renewable energies. The ultimate goal is to make reliable statements about how a regional planning law that can accommodate acceleration and expansion as well as high environmental protection requirements and the rights and interests of individuals affected by the plans should be designed.

Selected projects

- Integrated UFZ project EnergyLandUse: Land use aspects of transforming the energy system. Sustainable options for a renewable energy era
- The Helmholtz Alliance ENERGY-TRANS: Future infrastructures for meeting energy demands. Towards sustainability and social compatibility
- The need for legal action for adaptation to the impacts of climate change – analysis, amendment and development of legal instruments (commissioned by the German Federal Environment Agency)
- Lowering the barriers of environmental assessment in the planning and approval of wind energy use on land
Water Management and Water Resources Protection Law

In the field of water management and the protection of water resources, the department is concerned primarily with the integrated water resources management (IWRM) approach and its legal implementation at international, European and national level. Internationally, we deal with the development of principles of international law and minimum standards in the management of transboundary waters as well as with the development of institutional concepts and instruments for overcoming not only global but also region-specific barriers to the IWRM approach. The worsening problem of water scarcity in many regions of the world is at the forefront of our work. At European level, we are primarily concerned with the implementation of the Water Framework Directive, giving special attention to the specification of the quality objectives, the application of the exemption regime, and the handling of the polluter-pays principle and the cost recovery principle.

Linking water law effectively to the relevant adjacent regulatory areas, namely nature conservation and agriculture law, flood control law and regional planning law is another important focus of our work, especially with regard to national law. An important perspective for achieving this, gained mainly from our interdisciplinary cooperation with the field of scientific water research, is that of the landscape water regime. The department also deals with urban water management law and examines to what extent the existing regulatory framework can promote sustainable adaptation to demographic change and climate change conditions.

Selected projects

- Integrated UFZ project: Healthy Aquatic Ecosystems
- Integrated UFZ project: Water Scarcity
- Responsibility for Sustainability – Management of water resources in the EU (funded by the German Federal Ministry for Education and Research – BMBF)
- Developing waste water charges and water extraction charges into an all-inclusive water use charge (commissioned by the German Federal Environment Agency)
Nature Conservation Law and Agri-Environmental Law

The research within this field focuses on German and European nature conservation law and on the environmental and sectoral laws related to agriculture. Because they are so closely related, issues of water protection and soil protection as well as climate change mitigation and adaptation are also important topics of investigation. The department keeps up with the current amendment and implementation processes in nature conservation law, which have been necessitated mainly by the European directives on the protection of habitats and species. Furthermore, the department analyses and develops recommendations for improving the law on nature conservation in view of climate change and the ongoing loss of biodiversity. In addition to the establishment of the European network of protected areas, Natura 2000, the department also explores the legal options for improving the establishment of habitat networks and protection from invasive species. Closely related to this, but going beyond nature conservation, is the quest for regulatory models that promote environmentally sustainable land use in agriculture and forestry in order to conserve biodiversity and ecosystem functions and services for future generations. In cooperation with other scientific disciplines, we investigate how legal instruments help to defuse land-use conflicts and promote and maintain synergies between ecosystems and anthropogenic uses.

Selected projects

- Integrated UFZ project: Management of land-use conflicts – between land sharing and land sparing
- Agri-environmental law – legal and other instruments for increased environmental protection in agriculture (commissioned by the German Federal Environment Agency)
- European nature conservation law and its implementation in Germany
- PolicyMix: Assessing the role of economic instruments in policy mixes for biodiversity conservation and ecosystem services provision (funded by the EU)
Hazardous Substances Law

Industrialised societies develop and use a wide range of chemical substances including pesticides, coatings, pharmaceuticals, cosmetics, scents and nano-substances. If these chemicals make their way into the environment, they can accumulate and pose a risk to humans, animals and plants. To protect against these risks, a number of regulations to control and deal with hazardous substances have been drawn up, particularly at EU level, for instance the REACH-Regulations on chemicals, the law on pesticides, or the European legislation on pharmaceuticals. However, alarming findings of all kinds of substances in the environment, and even in drinking water, show that the existing control systems do not satisfactorily capture the risk situation. This applies especially to so-called micro-pollutants such as pharmaceutical substances, which are notoriously difficult to control due to their specifics (entry in small quantities, in some cases high ecotoxicological potential, uncertainty about chronic and cumulative effects, difficulties with analytical detection methods).

To solve these areas of conflict, we analyse and develop recommendations for existing substance- and product-based control systems, examine how they can be interlinked with water protection law and investigate the steering potential of taxation instruments. Complex action strategies to reduce the environmental and health risks posed by chemical substances and micro-pollutants in the aquatic environment are being designed. The department also deals with the transposition of European directives on hazardous substances into national law (e.g. REACH-Regulation, designation of priority substances) and makes contributions to the conceptual development of the law on hazardous substances.

Selected projects

- Risks of chemical substances, water quality and control of chemicals
- Strategies for the substitution of environmentally hazardous substances in European and German law on hazardous substances (DBU Doctoral Scholarship)
- Practical design of an evolving wastewater charge (commissioned by the German Federal Environment Agency)
**Regular Symposia**

**Leipzig Environmental Law Symposium**
Annual environmental law symposium of the Institute for Environmental and Planning Law of the University of Leipzig and the Helmholtz Centre for Environmental Research – UFZ (since 1996)

**ZUR-Conference**
Annual meeting of the journal Zeitschrift für Umweltrecht (since 2005)

**Leipzig Meetings on Environmental and Planning Law**
Winter semester lecture series by the Institute for Environmental and Planning Law of the University of Leipzig, the Leipzig Association for Environmental and Planning Law and the Helmholtz Centre for Environmental Research – UFZ (since 2009)

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**Editorships**

The department assumes a position of responsibility for the publication and composition of two important environmental law journals.

**The Zeitschrift für Umweltrecht (ZUR)** is a German-language journal which has been in circulation for the past 20 years. It is one of Germany’s leading environmental law journals and is issued monthly by the Nomos Verlag.

[www.zur.nomos.de](http://www.zur.nomos.de)

**The Journal for European Environmental and Planning Law (JEEPL)** responds to the growing importance of European environmental law and the need for broad discussion in English. This quarterly journal is published by the Martinus Nijhoff/Brill Verlag.

[www.brill.nl/jeep](http://www.brill.nl/jeep)
International Cooperations

European Environmental Law Forum (EELF)
www.eelf.info

Réseau européen du droit de l’eau
(European Network for Water Law)

International Union for Conservation of Nature (IUCN)
Academy for Environmental Law
www.iucnael.org

Research Institute of Environmental Law of Wuhan University (China)
www.riel.whu.edu.cn/english

Cooperation with the University of Leipzig

The Helmholtz Centre for Environmental Research – UFZ is a non-university institution which has established formal partnerships with several national universities. These cooperative agreements relate to joint professorships and workshops, among other things. One such joint professorship is held by the Head of the Department of Environmental and Planning Law, Prof. Köck, who was appointed to the newly established Chair of Environmental Law in the Faculty of Law at the University of Leipzig in 2001.

Together with the university’s Institute for Environmental and Planning Law and the Leipzig Association for Environmental and Planning Law, the Department of Environmental and Planning Law at the UFZ regularly organises symposia and workshops, in particular the environmental law symposium and the Leipzig meetings on environmental and planning law.
Directions to the UFZ in Leipzig

By Tram:
Starting from Leipzig Central Station, take the No. 3 tram in the direction of Sommerfeld or Taucha and get off at the tram stop Permoser-/Torgauerstraße. Cross the street and walk eastward for about 5 minutes to get to the main entrance in the Permoserstraße.

By Car:
From the A14 motorway, take the exit marked “Leipzig-Ost” and drive in the direction of “Stadtzentrum” (City Centre) via Torgauerstraße (B87) or Permoserstraße (B6). The main entrance is located at Permoserstraße 15.

Further Information

Up-to-date information on the department, its staff, projects, publications and meetings can be found at www.ufz.de/upr.