



Bavarian Environment Agency



About us

The Bavarian Environment Agency (LfU) is the central authority for environmental protection and nature conservation, geology and water resources management. We gather and evaluate data concerning the state of the environment in Bavaria. We use this to develop objectives, strategies and plans for sustainable utilization and safeguarding of our environment. Depending on the area of activity, we play a role as expert evaluator, providing opinions and functioning as a supervisory or approval authority.

Our varied and diverse areas of responsibility include waste management, system safety, soil conservation, geology, water and groundwater protection, flood control, climate change, noise and vibration protection, air pollution control, nature conservation and landscape preservation, materials and chemicals evaluation, radiation protection, environmental management, hydraulic engineering, water supplies, as well as issues extending across technical fields and media.

We put our knowledge to practical use: at conferences, in national and international committees, as an advisory body for economics, science, authorities, municipalities, politics and the public sector, in the Internet, our online data and info services and via publications.

The LfU commenced its work in its present form on August 01, 2005. The three former Land Offices for Water Management, Geology and Environmental Protection as well as parts of the Land Office for Health and Safety at Work, Occupational Medicine and Safety Technology were merged on this date.

The LfU employs over 1000 scientists, engineers, technicians as well as laboratory personnel and administrative staff. The head office is in Augsburg, where a further building is located with the Josef-Vogl Technical Institute. A major department is

situated in Hof, with further offices in Kulmbach, Marktredwitz, Wielenbach and Garmisch-Partenkirchen (State Ornithological Institute). The offices in Munich are gradually being disbanded.

The LfU is an authority in the business division of the Bavarian State Ministry of the Environment and Public Health.

Our tasks



Waste – avoidance, recycling, disposal

At home, in the office and during production – waste results everywhere. It is also an all-pervasive side-effect of our modern lifestyle. In the past, refuse with all its recyclable materials was dumped in landfill sites or, better, sent to waste incineration plants. Nowadays, emphasis is placed on the principles of waste avoidance and recycling management. As before, incineration plants remain an integral component of the waste industry.

The Bavarian Land Office for the Environment (LfU) supports companies, municipalities and households in the proper handling of waste. It assesses and inspects disposal facilities and compiles waste balances. On this basis, waste management concepts are refined with the support of our technical institute.



Analytics / Materials - measuring, monitoring, testing

In order to avert hazards to our environment, it is necessary to know which and how many pollutants are present in our surroundings. Waste, ground, water and air samples are therefore tested for environmentally-relevant materials and their concentration determined using state-of-the-art measuring technology in the Bavarian Land Office for the Environment (LfU).

Investigations are also carried out concerning how the substances behave, spread or break down in nature. The LfU has developed a wide range of bio-monitoring processes for this. The accumulation of substances in aquatic animals is monitored just as accurately as the long-term effects of estrogens on the organism. The inspection and approval of environment-analytical laboratories is also the responsibility of the LfU.



Earth – the ground we stand on

One of the most important environmental media is the ground. We stand and move on it, build houses and roads on it. We use it for both cultivation and recreation. Our ground is a living ecosystem with many important functions in the balance of nature. Its condition and nature affect water quality, the water balance, vegetation, as well as the quality of much of our food. Sealing, soil erosion, improper utilization and compaction are the greatest hazards facing our soils.

The Bavarian Land Office for the Environment (LfU) develops concepts for sustainable and eco-friendly ground use by researching, monitoring and mapping Bavarian soils. These concepts are based on the Bavarian Ground Conservation Program, taking the various interests of economics, politics and science into account.



Geology – profound insights from the earth

Usually we know very little about the structure of the earth below our feet. Who cares about whether they are walking on karstic, gravelly or sandy ground?

Yet, for many environmental issues - e.g. groundwater replenishment, high-water hazards or landslides - geological knowledge is very important.

The Bavarian Land Office for the Environment (LfU) compiles geological, hydro-geological and pedological maps of Bavaria. These show all rock formations and soils as well as groundwater occurrences according to their composition and distribution. This data typically serves for preventative soil conservation and the exploitation of raw materials. The probability of landslides and other hazards in the ground can be determined with the "Georisk" program. Though rare, earthquakes are an increasing phenomenon in Bavaria. The Earthquake Service of the LfU registers all tremors and helps prevent more extensive damage through exact forecasts.



Noise – an inescapable nuisance

A four-lane highway during the rush hour, an airplane taking off, partygoers out on the street at night, booming music from a festival ... Hardly any other environmental stress annoys us as much as noise. You can close your eyes, but not your ears. Almost 70% of the population in Germany feel irritated by noise. Scientific studies verify that too much noise is harmful to health.

The Bavarian Land Office for the Environment (LfU) attempts to find remedies here. Measuring, evaluation, improvement – the noise problem is to be alleviated with these three steps. Noise level measurements on traffic routes as well as industrial and leisure facilities provide data which is then published in compact form. The LfU also provides detailed information on active and secondary noise protection.



Air – a deep breath of freshness

Industry, road traffic and households pollute our air with harmful substances. High concentrations of these can be harmful to people, animals and plants or even materials. Almost everyone is familiar with the ozone announcements in summer, warning us of physical activity in the open air, or the discussion surrounding fine dust in our towns and cities. Extensive efforts to combat such air pollution are necessary, if we wish to retain health and a quality of life.

The Bavarian Land Office for the Environment (LfU) records the air quality in Bavaria with its measuring system. The state of the air is documented around the clock. In this way, the populace can be warned in good time if limit values are exceeded. Every individual can make his or her own contribution to clean air. The LfU provides information on protective and preventative measures here in the Internet as well as in its brochures and presentations.



Nature – diversity is the spice of life

Bavaria is famous for its landscapes of stunning natural beauty. The habitats for animals and plants are as rich as they are diverse. Yet, our flora and fauna are also threatened by the spread of change. Mankind is increasingly encroaching on natural habitats with new construction and housing measures. The "Red List" of endangered animals and plants documents this clearly. Nowadays, many species can only survive if they are protected in an effective manner.

The Bavarian Land Office for the Environment (LfU) records all endangered species, while mapping habitats worthy of conservation and developing concepts for protecting species and ecosystems. Protection and development need not be contradictory. Concepts concerning recreation and sporting facilities that do not harm the natural environment are proof of this. Landscape planning helps to achieve harmony between the environment, man and economic development. We record these areas devoted to equilibrium and replenishment in our register of ecological areas.



Radiation – the dosage is what matters

We are exposed to electromagnetic and ionizing radiation at almost every location. Part of this exposure to radiation is natural in origin – as background radiation from space or radiation from the earth's crust. This exposure to radiation is unavoidable. However, besides this, we are also confronted with radiation from artificial sources, mostly from X-ray examinations, but also from industrial systems, mobile communications and medical technology.

The Bavarian Land Office for the Environment (LfU) works towards keeping this avoidable component of exposure to radiation as low as possible. Medical systems generating ionizing radiation or using radioactive must be approved by the LfU. Numerous measuring and monitoring programs regularly provide data on environmental radioactivity, radioactive departments from nuclear power stations and immissions by electromagnetic fields.



Water – as varied as life itself

Water plays an important role in our life: We swim and bath in it, we use it as drinking water, and prepare meals with it. Hardly any other environmental issue is treated in such a differentiated and extensive way as this.

No matter whether dealing with groundwater, drinking water, waste water, rivers and lakes or flooding – a wide range of measuring data and information is collected and processed at the Bavarian Land Office for the Environment (LfU). This is used to compile groundwater balances, pollutant mappings and water level forecasts. These help to provide preventative protection for our water and warn the populace against hazards in adequate time – for example due to flooding.



Across the spectrum - evaluation, communication, information

People divide nature into separate compartments, distinguishing between water, air, soil etc. Nature itself is free of such artificial delimitations. Everything is related to everything else. Air pollutants mix with precipitation to form acid rain, which acidifies the soil and threatens ground water. Integral environmental monitoring helps record such complex interactions and interconnections. Environmental indicators are used to analyze developments in terms of the overall situation, the data being evaluated and communicated in a way that politicians and citizens can understand.

Das "Environmental Economics Info Center" helps companies with the introduction of environmentally-friendly methods and procedures. In municipal "Agenda 21 Groups" citizens and communities take important steps towards a sustainable, future-oriented development of their region. Saving areas is becoming increasingly important in this regard. In doing so, they are supported with information from the LfU.



Municipal environmental protection in Bavaria - knowledge at hand!

The Bavarian local authorities, markets and towns/cities as well as the rural districts play an important role in the implementation of Bavarian environmental policies. They establish and administer the economic, social and ecological infrastructure, while helping shape municipal environmental policies. Moreover, as the administrative level closest to citizens regionally and technically, they are required to inform and mobilize the population concerning various environmental issues, forming an inspirational model for citizens through exemplary conduct.

As defined by Agenda 21 in tandem with strategies centered around the environment and sustainability on a European, German and Bavarian level, the municipalities are supported in many areas of municipal activity. The Bavarian (Environmental) Administration provides an overview of the tasks for this with supplementary opportunities for obtaining information as part of this offer.

Environmental expertise

Environmental protection on an everyday basis - our daily affairs comprise routine activities above all. We do not wish to waste time or thought on such everyday issues, as everything should be fast and efficient. Compact and well-founded information is therefore necessary to break through old-established habits.

We can achieve a lot in the private sphere in particular. Energy saving not only saves money but also protects the climate. And sustainable consumption safeguards not only workplaces. In this way, we might perhaps protect just the species of plant from extinction whose help can be used to combat a future infectious disease.

What household chemicals are environmentally-friendly? Is geothermal energy an alternative for your own home? The questions are many and diverse. But effective environmental information should always be clear and understandable by all, as well as impartial and objective.

Environmental economics

Operational environmental protection in Bavaria - Knowledge at hand!

Like all human activities - our economic development has implications for the environment. All environmental media, such as water, ground, air as well as the climate and our natural resources are affected by this. That means subjects concerning wastewater, refuse, emissions and energy, as well as noise, chemicals, nature conservation or radiation protection and frequently environmental management play an important role in companies. Having to deal with these issues on a daily basis regularly presents companies with challenges:

- What new legal requirements have been introduced?
- Where do I find examples from companies which have successfully implemented environmental measures?
- How do I find the right contact for my questions?

The Bavarian Land Office for the Environment (LfU) supports companies in their operational environmental protection with its Info Center for Environmental Economics (IZU). The service is primarily oriented towards small and medium-sized companies as well as multipliers (chambers, associations and consultants). In conjunction with all specialist departments of the LfU and our partners in chambers, associations and companies, our Internet sites offers you the following services, amongst others:

- Information on current environmental issues
- Legal foundations and application notes in environmental law
- Environmentally-relevant support programs
- Expert knowledge
- Examples of success from companies

Organisation

President

Vice President

President's Staff

Special Unit Climate Change

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- 12 Communication, International Collaboration
- 13 Print Media, Cartography
- 14 Environmental Information, Data Collection, Processing and Disclosure
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- 16 Intermedia Environmental Monitoring
- 17 GeoForum Bavaria, Geosites

Department 2 - Air, Noise, Plant Safety

- 21 Air Quality Control in Plants
- 22 Plant Safety, Energy Efficiency
- 23 Register of Industrial Facilities, Pollutant Emission Register, Dispersion Modelling, Reports
- 24 Air Quality Monitoring Southern Bavaria, Traffic and Air Quality
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Department Z/A - Central Services

- Z1 Organisation, Internal Operations, Research Coordination, Contract Assistance
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Department Z/B - Personnel, Budget, IuK

- "IT 21" ICT Concepts for (transposition of) EU Directives
- Z3 Human Resources, Education and Training, Travel Services and Vehicle Fleet
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