

### ***The Environmental Specimen Bank in the context of environmental monitoring***

The transfer of the **precautionary principle** (under the aspect of sustainability and overall national government requirements) into practical federal environmental policy requires a corresponding scientific infrastructure, a comprehensive data base to facilitate identification and assessment of the current environmental situation, and a long-term observation of the chemical, physical and biological processes taking place in the environment with respect to space and time.

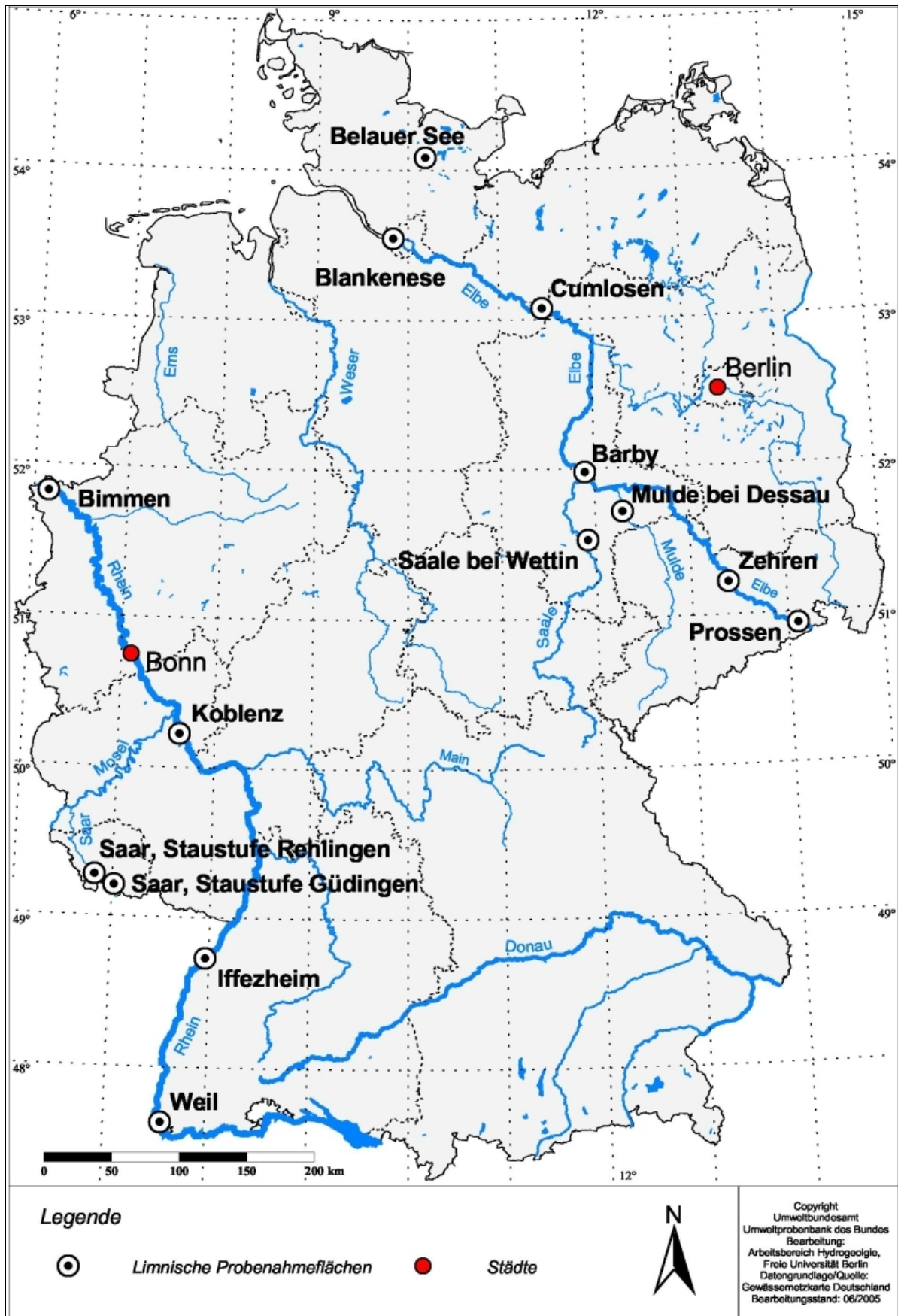
The distribution and transportation of substances released into the environment primarily depends on their physical/chemical properties and their stability. All these substances and their conversion products are found in ecosystems, sometimes in higher concentrations.

An **ecosystemic characterization** and evaluation of representative habitats within Germany – encompassing both the current situation and future development – will provide an important basis to ensure the prompt

- Identification of emerging **aberrations** within ecosystems
- Assessment of findings about the **nature and scope** of any aberrations arising and the consequences thereof (damages)
- Collation of findings to enable the **prioritisation of political action** by the Federal Government, and
- Formulation of a **precautionary policy** by the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, both for nature and environmental conservation, and for human health.

As an important part of **environmental monitoring** the Environmental Specimen Bank provides a means of solving these tasks by supplying ecological and toxicological evidence in the form of archiving (i.e. storing in a manner which precludes chemical changes) representative soil, plant, animal and human specimens and performing initial characterization thereof.

Within the framework of the ESB the FUB takes suspended matter and sediment samples at the sampling locations.



Übersichtskarte PNF der Probenarten Sediment und Schwebstoff (Map of the freshwater sampling locations)