The way forward

Germany's new legal basis for ecosystem protection and management plans for its river basins is set to take effect in 2013. The new approach does not merely mean drawing up river basin management plans and programmes of measures. Many stakeholders have to be involved as far as possible and in good time. This includes the water protection authorities and farmers, but also environmental and water users, businesspeople and local government. No goal can be achieved in the area of water protection without political commitment.

The key measures for achieving the objectives are:

- Establishment of river basin management plans and programmes of measures in order to achieve the good water body status.
- Final deadline for implementation of the river basin management plans.
- Monitoring programmes ready for implementation.
- Period during which Water Framework Directive objectives are to be met.
- Implementation of good practice in agriculture (e.g. use of tillage strips).
- Water buffer strips.
- Relocation of dykes.
- Cleaning manure storage with lower emission technology.
- Restoration of grounds.

The programmes for achieving the good water body status of Germany's river basins are to be implemented in close cooperation with all stakeholders, including water users, various interests, municipalities, parties responsible for maintenance, state and federal water and agricultural authorities, and the public. The programmes are to be carried out in accordance with the polluter pays principle. The programmes are to be monitored and measures that entail implementation of water prices that allow for the costs of water protection will also be a priority. Measures to achieve the good status for European waters by 2015 in accordance with a clearly defined plan.

The way towards healthy waters

The Water Framework Directive is valid in all European Union states, including Germany, and ensures that all river basins will be classified as having good status by 2015. The directive promotes a uniform water protection framework. This is supported by the fact that the United Nations Convention on Biological Diversity has the goal of attaining “good status” for Europe’s waters.

The programmes for achieving the good water body status are to be monitored at regular intervals. The programmes are to be monitored at regular intervals, and the status of our water bodies and their conservation measures is to be planned and implemented accordingly. The Water Framework Directive stipulates that river basin management plans and programmes of measures are to be implemented in close cooperation with all stakeholders. The programmes for achieving the good water body status are to be implemented in close cooperation with all stakeholders, including water users, various interests, municipalities, parties responsible for maintenance, state and federal water and agricultural authorities, and the public. The programmes are to be carried out in accordance with the polluter pays principle. The programmes are to be monitored and measures that entail implementation of water prices that allow for the costs of water protection will also be a priority. Measures to achieve the good status for European waters by 2015 in accordance with a clearly defined plan.

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The way towards healthy waters

The Water Framework Directive

- The way towards healthy waters' short version is based on the brochure of the same name. The full version is available for free download at http://www.umweltbundesamt.de/publikationen/wfd/plk-wfd.pdf.
The role of biological quality elements in ecological status assessment

Biological quality elements (BQEs) serve as indicators for the ecological status of water bodies and are assessed along different scale levels: from the river basin to the river reach. The assessment of BQEs is based on the biota composition and the structure of the biota community. Biological quality elements include a wide variety of biota categories, such as aquatic invertebrates, aquatic flora, and fish species.

**Ecological Status**

- **Good status**: More than 70% of biological elements are present.
- **Moderate status**: More than 40% to less than 70% of biological elements are present.
- **Poor status**: More than 10% to less than 40% of biological elements are present.
- **Failing status**: Not more than 10% of biological elements are present.

**Chemical Status**

- **Good chemical status**: The concentration of pollutants is below the maximum concentration for specific water bodies.
- **Moderate chemical status**: The concentration of pollutants is between the maximum and threshold concentrations.
- **Poor chemical status**: The concentration of pollutants is above the threshold concentrations.
- **Failing chemical status**: Not achievable under normal conditions.

**Physicochemical Quality Elements**

- **Temperature**: Optimal for aquatic life.
- **pH**: Neutral to slightly alkaline.
- **Oxygen content**: Sufficient for aerobic life.
- **Turbidity**: Low enough to allow light penetration.

**Groundwater Bodies**

Groundwater bodies are assessed based on their status, which can be categorized as good, moderate, poor, or failing.

- **Quality of groundwater**: Achieved if the groundwater level meets the requirements for decades.
- **Long-term mean annual abstraction**: Not to exceed the available groundwater resources.
- **Secondary to unduly high groundwater abstraction**: Not to exceed the available groundwater resources.
- **No saltwater or other intrusions**: Must be maintained.
- **Natural groundwater level**: Must be maintained.
- **Tideelbe working area**: Classed as "poor" owing to the lack of saltwater or other intrusions.
- **Quantitative deficiencies**: Occur in coniferous forests and moors.
- **Pollutants in groundwater**: Input into surface waters, causing degradation.

**Chemical Status of Germany's Groundwater Bodies**

- **Groundwater status**: Second layer of groundwater status classification.
- **Good qualitative groundwater status**: Meets domestic standards.
- **Moderate qualitative groundwater status**: Meets additional requirements and is a guarantee for good quantitative status.
- **Poor qualitative groundwater status**: Not sufficient for normal conditions.
- **Failing qualitative groundwater status**: Significant point sources are municipalities with significant risk to the aquatic environment or humans, such as heavy metals or substances which are a significant risk to the aquifer environment.

**Chemical Status**

- **Threshold values in accordance with the Water Framework Directive**: Sufficient for protection against eutrophication problems in surface water bodies.
- **Eutrophication problems in surface water bodies**: Significant point sources are municipalities with significant risk to the aquatic environment or humans, such as heavy metals or substances which are a significant risk to the aquifer environment.

**Special regulations**

- **Exemption under Art. 4**: Not applicable for German groundwater bodies.

**Conclusion**

The objectives in question cannot be met on the grounds that they are unfeasible from a technical standpoint, or modified to such an extent that it is not possible to improve their condition in the foreseeable future. For these water bodies, the objectives must be achieved on the basis of environmental quality standards.

Source: Berichtsportal WasserBlick/BfG, Stand 22.03.2010