



Water Framework Directive and Biodiversity

An integrative approach for the River Basin
Management Plans

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Why biodiversity is important for RBM?

Aquatic species - integral part of the aquatic ecosystems with vital role in ensuring good water quality (nutrient cycling, self-purification)

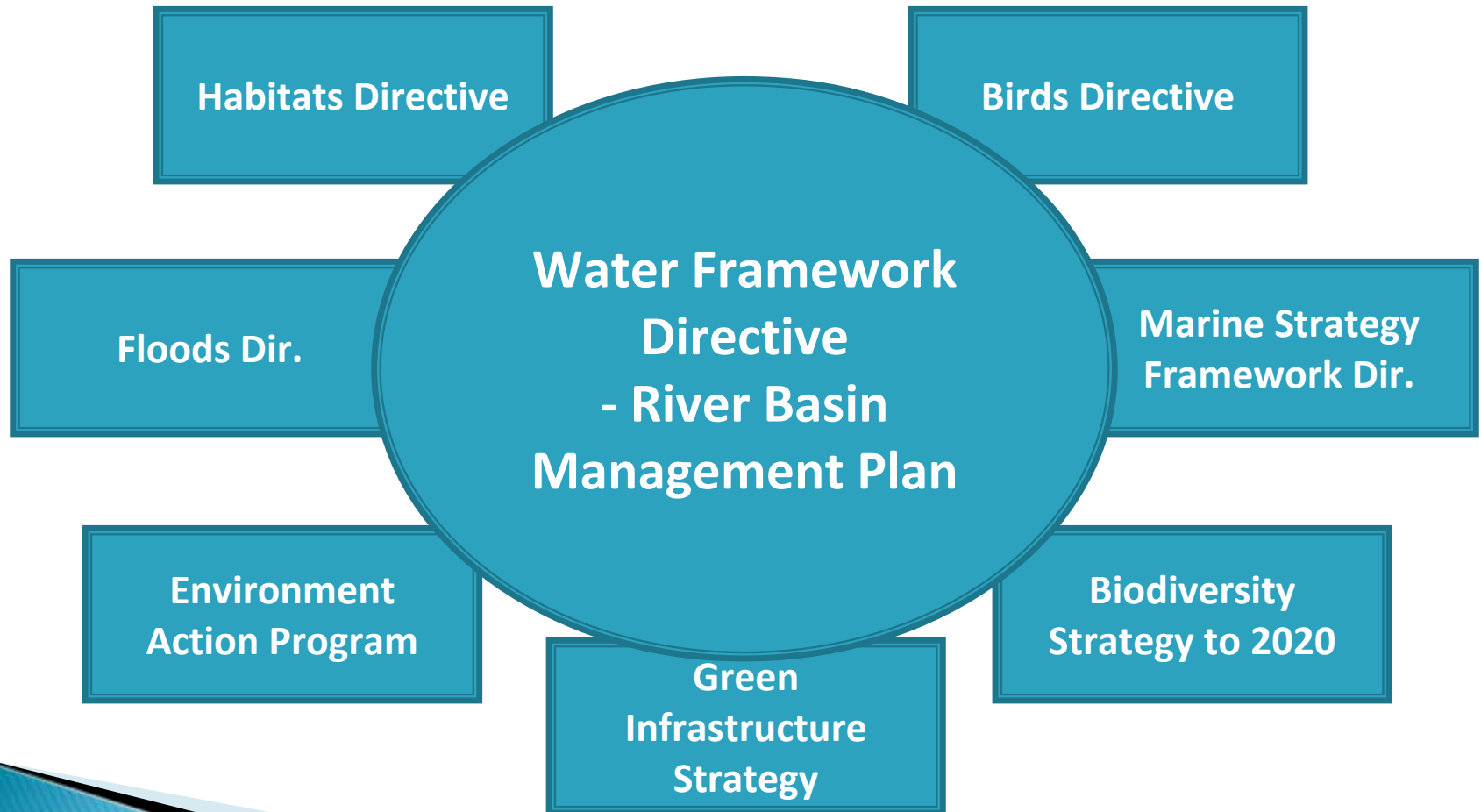
Evaluation of good ecological status needs coordination with biodiversity data - the monitoring of aquatic species is requested by Water Framework Directive (Biological Quality Elements: phytoplankton, periphyton, macrophytes, macroinvertebrates, fish)

Many aquatic habitats are included in or influence species and habitats of community interest (Natura 2000 network) – strong connection of WFD to Birds and Habitats Directives

Other EU directives and strategies include connections to biodiversity elements that should be integrated in the RBM to increase its efficiency and support financing the Joint Program of Measures.



Connection of WFD – RBM with other EU environmental policies



Habitats Directive 92/43/EEC



Aim: conservation of natural habitats and wild species of Community interest

Maintain or restore such habitats and species at favorable conservation status
(Art. 2)

Management of landscape features with major importance for wildlife (e.g. **rivers with their banks, ponds**, small woods) , essential for the migration, dispersal and genetic exchange of wild species (Art. 10)

Surveillance of the conservation status of the natural habitats and species, especially priority natural habitat types and priority species (Art.11)

Report on the implementation of the measures every six years (Art. 17) – report available to the public.

Research supporting the objectives of this directive, and **transboundary cooperation** between the MS (Art. 18).

Birds Directive 79/409/EEC



Aim: conservation of naturally occurring birds species in the wild state in the EU MS. It covers **the protection, management and control of these species** and applies to birds, eggs, nests and habitats (Art. 1).

The preservation, maintenance and reconstruction of habitats shall include:
(a) **creation of protected areas;** (b) **management in accordance with the ecological needs** of habitats ; (c) **reconstruction of destroyed habitats** (d) **creation of habitats** (Art. 3.2).

Protection of wetlands, especially of international importance (Art. 4.2).

Avoid pollution or deterioration of habitats or any disturbances affecting the birds (Art. 4.4)

Report every three years to the Commission (Art. 12).

Floods Directive 2007/60/EC



Aim: establish a framework for the assessment and management of flood risks, to reduce the adverse consequences for human health, environment, cultural heritage and economic activity

Human activities (human settlements and economic assets in floodplains, reduction of the natural water retention by land use) **and climate change contribute to an increased likelihood and adverse impacts of flood**

Flood risk management plans should focus on prevention, protection and preparedness. With a view to **giving rivers more space**, they should consider where possible the **maintenance and/or restoration of floodplains**

Member States shall **make available to the public** the preliminary flood risk assessment, the flood hazard maps, the flood risk maps and the flood risk management plans (Art. 10)

Marine Strategy Framework Directive 2008/56/EC



Aim: Achieving Good Ecological Status by 2020

Marine strategies shall apply an **ecosystem-based approach** to the management of human activities

GES – **use of the marine resources conducted at a sustainable level**

11 descriptors – some connected to River Basin Management

- **Biodiversity** is maintained
- **Non-indigenous species** do not adversely alter the ecosystem
- The population of **commercial fish and shellfish** species are within biological safe limits
- **Eutrophication** is minimised; **contaminants in food are below safety limits**
- Permanent **alteration of hydrographical conditions** does not adversely affect marine ecosystem

Biodiversity Strategy to 2020 COM 244 (2011)



Aim: Halting the loss of biodiversity and the degradation of ecosystem services in the EU by 2020, and restoring them in so far as feasible, while stepping up the EU contribution to averting global biodiversity loss.

- Conserving and restoring nature
- Maintaining and enhancing ecosystems and their services
- Ensuring the sustainability of agriculture, forestry and fisheries
- Combating invasive alien species
- Addressing the global biodiversity crisis
- Contributions from other environmental policies and initiatives

Environment Action Programme to 2020 (Decision 1386/2013/EU)



Thematic priorities:

The EU **economic prosperity** and well-being is underpinned by its **natural capital**, i.e. its biodiversity

Protecting, conserving, enhancing and valuing the natural capital requires tackling problems at source - **better integration of natural capital objectives** in the development and implementation of **other policies** (energy, transport, agriculture, trade, economy, research, etc)

Biodiversity conservation and the protection of soil and water should be **fully taken into account** in decisions relating to **renewable energy**

Halt the loss of biodiversity and **degradation of ecosystem services**, maintain the ecosystems and their services and **restore at least 15 % of degraded ecosystems**.

Fill in knowledge gaps such as mapping and assessing **ecosystem services**, **understanding the role of biodiversity** in underpinning such services, understanding how the **loss of biodiversity affects human health**

Green Infrastructure Strategy

COM 249 (2013)



GI = a **strategically planned network of natural and semi-natural areas** with other environmental features designed and managed to deliver a wide range of ecosystem services.

GI is specifically **identified as one of the investment priorities** – it contributes to regional policy and sustainable growth in Europe

Contribute to **mitigate the impact of climate change and disaster risk management**

Integrating GI considerations into river basin management can contribute significantly to delivering good water quality, mitigating the effects of hydro-morphological pressures and reducing the impacts of floods and droughts

Currently, **GI is based on Natura 2000 network**. It was established mainly to conserve and protect key species and habitats across the EU, but it also **delivers many ecosystem services** to human society, **estimated at EUR 200-300 billion per year**.

Why biodiversity should be preserved



Besides its **invaluable intrinsic value**, biodiversity **provides numerous benefits to human society**, some of them vital for our existence (such as oxygen provisioning, regulation of climate and atmospheric composition, etc).

Biodiversity loss is costly for society - according to economists, the **loss of biodiversity costs the EU €450 billion per year**

TEEB estimates that **global business opportunities from investing in biodiversity could be worth US\$ 2-6 trillion by 2050**

ENEA – MA WG on Cohesion Policy and Biodiversity: **approx. 1/6th of European jobs are linked to natural assets and environment**

➔ Preserving natural values should become an integral part of regional policies

Conclusion

The River Basin Management Plan is the only roof- management instrument who can integrate biodiversity and the different pieces of environmental legislation, to provide sustainable solutions at basin level



Thank you for your
attention!

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