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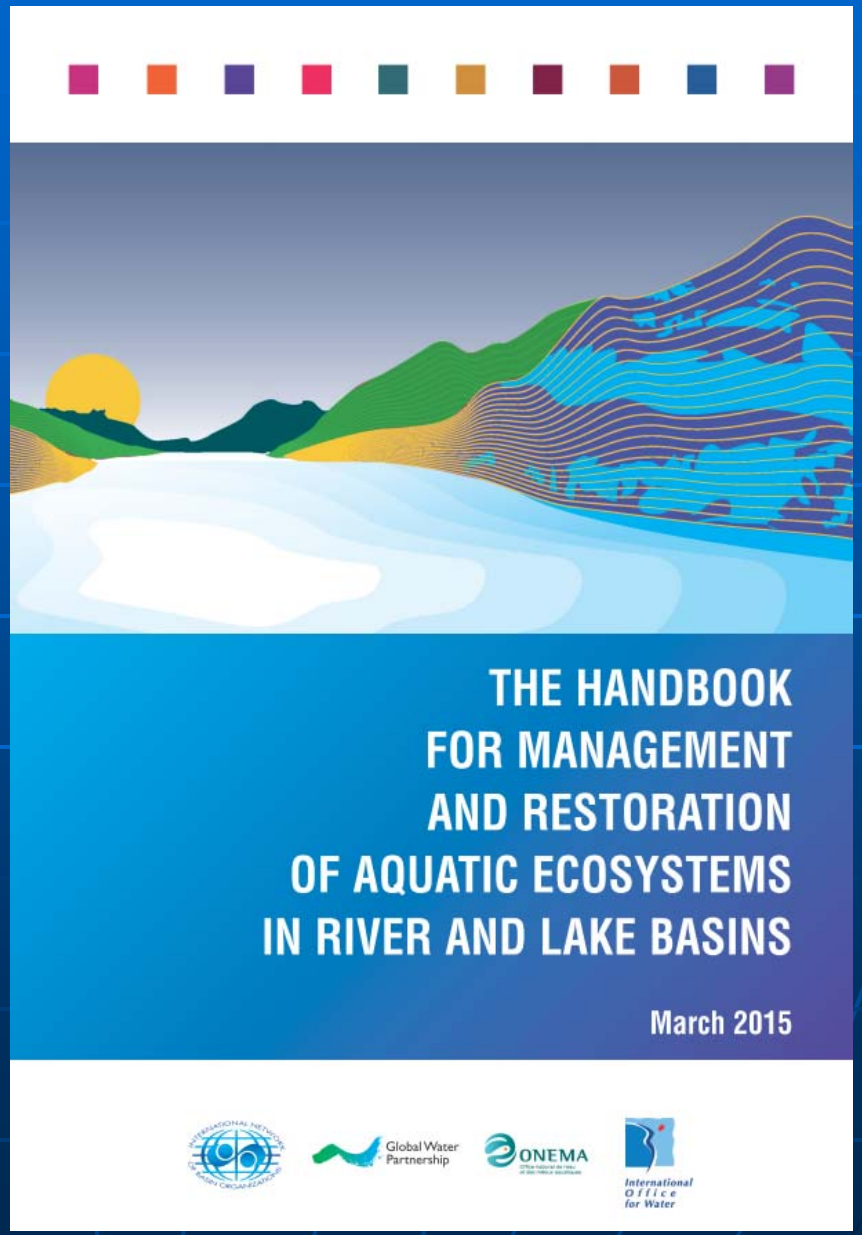
INBO Deputy Secretary



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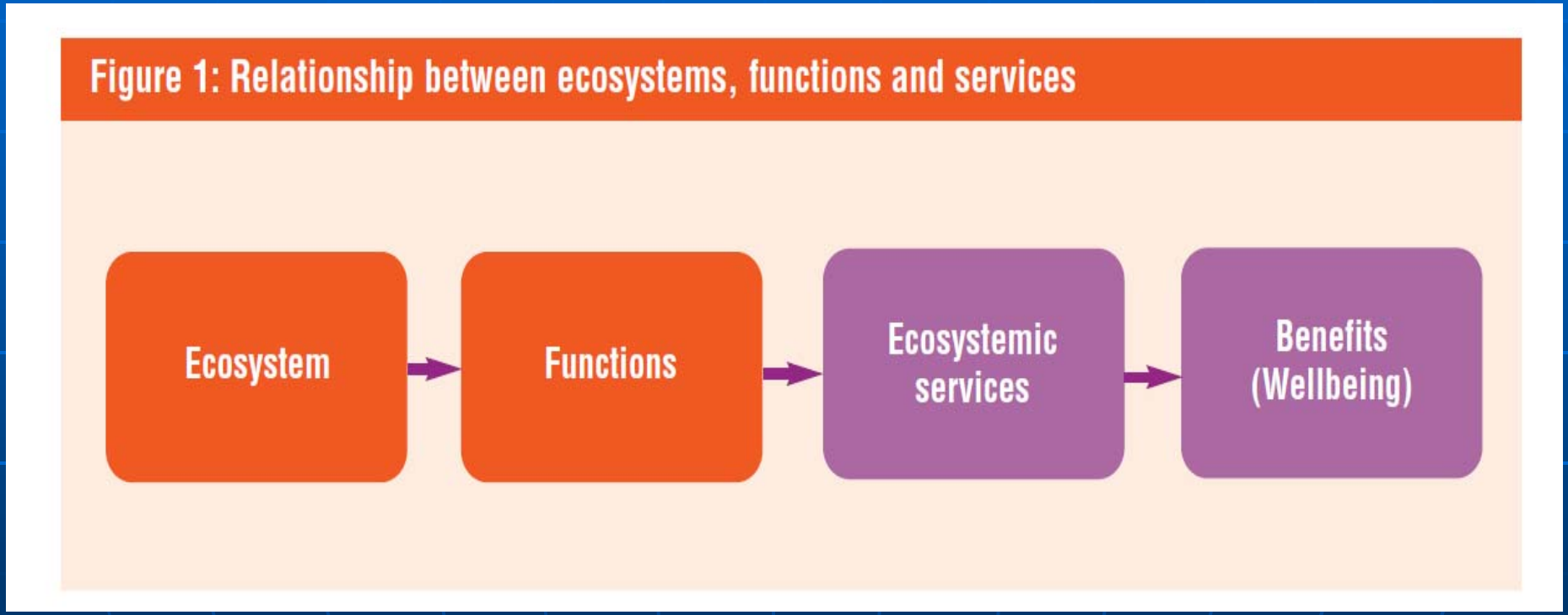

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Functions and benefits of aquatic ecosystems

- Roles and functions of aquatic ecosystems
  - Production : organic matter; water …
  - Regulation : soil water retention; self purification; flows, climate..
  - Organisation : landscape; biodiversity

Target 50 = Sustainability

- Human activities and pollution sources

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4 types of services

- Provisioning: food, water, materials, genetic and biochemichal resources ..
- Regulatory
- Cultural: recreation, well being ...
- Supporting: soil formation, nutrient cycle ...

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Including ecosystems in River/Lake Basin Management Plans

- Ecosystem considerations in basin planning processes (uses, users, quantity, quality .. Including ecosystems)
- From knowledge, understanding, to objectives, priorities, financial means ..
- Barriers to implementation (technical, financial, uncertain trends; governance…)

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Management and restoration of aquatic ecosystems

60% of world rivers = fragmented by human

- Restoration practices : 20 pages with many examples around the world *(re-connecting brooks, floodplains, former meanders ..; ecological continuity; dam removing; environmental flow …)*
- Green infrastructures and environmental impacts

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Management and restoration of aquatic ecosystems

Natural Water Retention Measures (NWRM):

- cross-cutting objectives and results, in agriculture, urban, forest areas and aquatic environment
- Structural and non structural
- Passive and active techniques (often mimic of analogous natural structures / features)

A new paradigm for ecosystems Sustainability A mixed portfolio

HARD

Traditional engineered "grey" infrastructure, budget, visibility

SOFT

Green infrastructure; NWRM
Bottom up; Participation;
Ownership; Cumulative social and environmental implications

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Governance and regulation

- The current water crisis affecting ecosystem services is mainly a crisis of governance
- European legislation and policies, including marine environmental policy
- Other examples

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Governance and regulation

- Framework for the governance of aquatic ecosystems

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Governance and regulation

- Strategic instruments for effective aquatic ecosystem governance

Combining the conservation of aquatic ecosystem services with Integrated Water Resources Management (IWRM)

Indicators ; capacity building, networking ….

- Main difficulties encountered in implementing restoration measures/projects

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Monitoring aquatic ecosystems

(22 pages)

Monitoring : what and how ?

- Methods and protocols (State, Pressures …)
- Parameters
- Check the efficiency of action
- Recommend adjustments
- Inform the public

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Economic and financial aspects

15 pages

- Aquatic ecosystems and the services they provide are inestimable

- But economic evaluation of ecosystems can make it easier to rank challenges and choices: why, what and how ?

2010 : loss of ecosystem services in the world = 12 000 billion € = 6% of Global Gross Domestic Product

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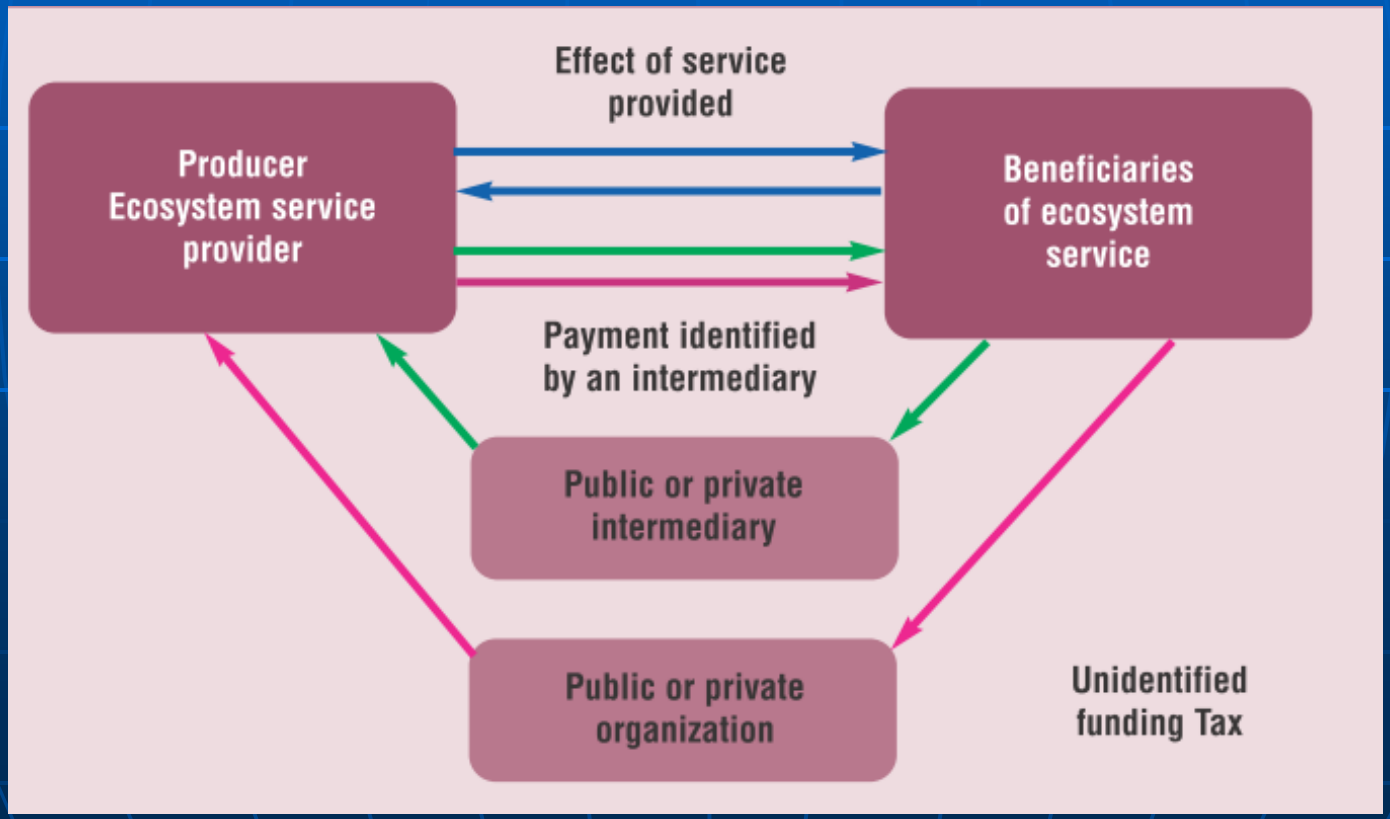
Economic and financial aspects

- Payment for environmental services

(Overview of PES implementation - Guidelines)



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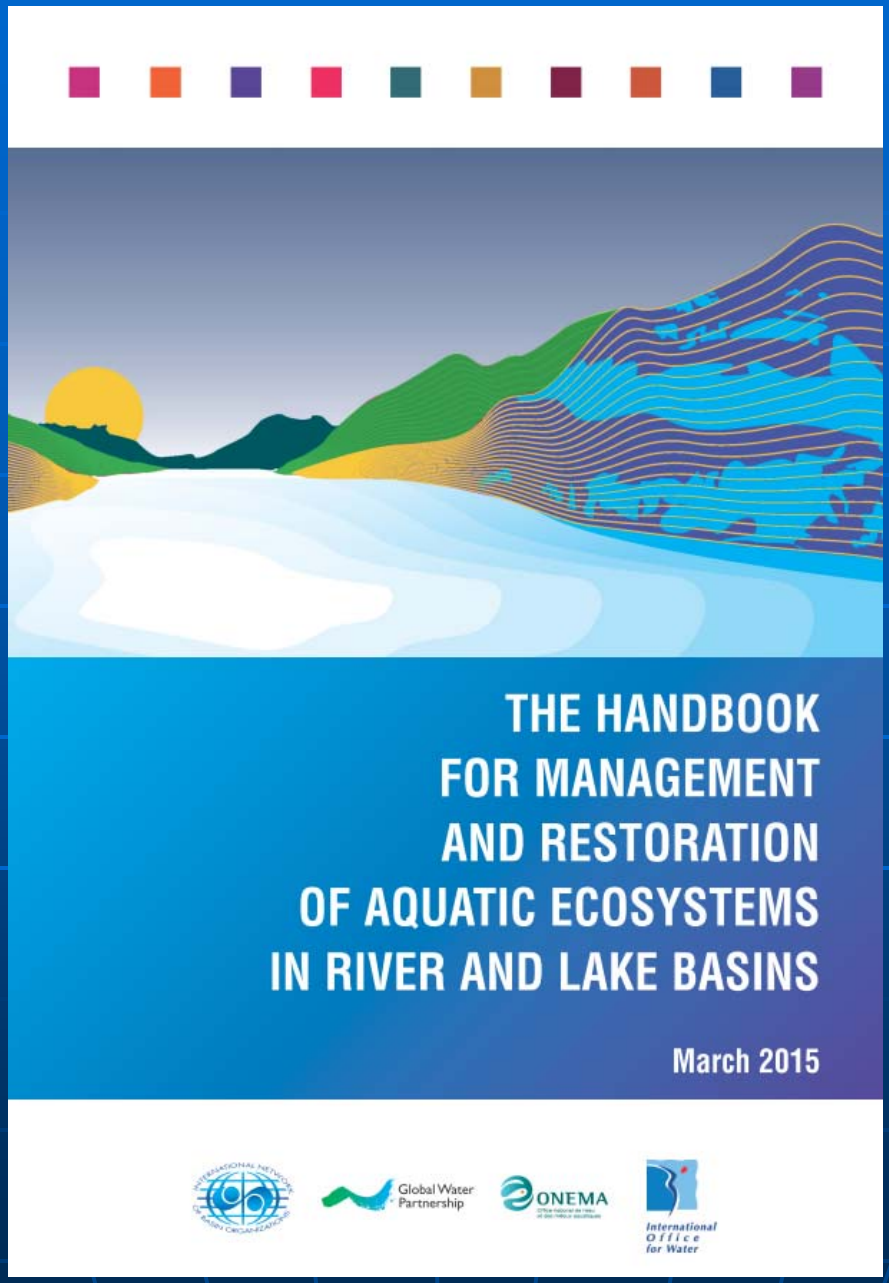

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