Water and Environmental Ethics: A Conceptual Framework

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GWSP Conference on *Global Dimensions of Change in River Basins,* University Club, Bonn, 6-8 December 2010

Why Study Ethics?

1. Our planet is in trouble (Cancun agenda)
2. Management of water and water ecosystems is unsustainable
3. Cultural and individual values motivate that behavior
4. Those values can and do change
5. Values/ethics constitute an important global dimension of change

Scope of the Ethics Framework

1. About **people** (utilitarianism)
2. About the **planet** (Earth ethics)
3. About **both** (win-win, co-existence)

People vs. Nature?

- Is there a difference between human and planetary interests?
- Fallacy of utilitarianism?
  - “a bounded and imperfect utilitarianism” (Alyson Flournoy (2003)
  - But utilitarianism is the basis for nearly all water management decisions
  - Slowly changing…

Evolution of Values Motivating Water Policies

1. **Conquest of Nature** (Water as a Resource)

   VALUE – (1) Nature exists for human benefit; (2) Nature needs to be tamed in order to be useful.

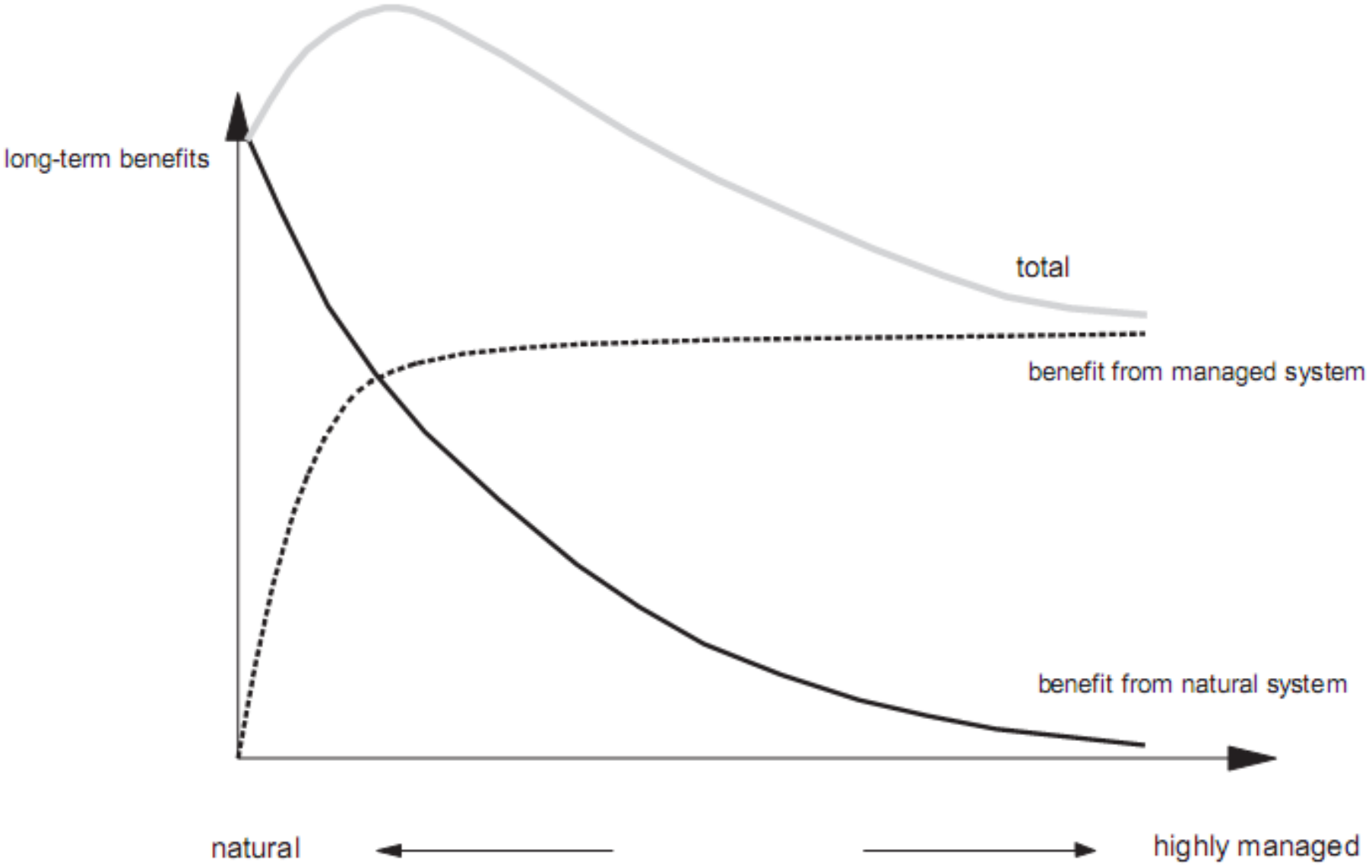
   - David Blackbourn – Rhine Basin
   - Donald Worster – Western US
   - Dam-building era (which still continues)

2. **Economic efficiency** (Cost-Benefit Analysis)

   VALUES: (1) benefits/costs can be translated into a common currency ($$) and compared on a cost basis; (2) Optimal solution: "the greatest good for the greatest number for the longest time"

   - Environmental Economics
   - Biodiversity (concept of unknown future values)
   - Multifunctionality of water (includes cultural and spiritual in accounting of benefits)
   - Australia experience (Pigram)
   - Mike Akerman (UNESCO Ethics paper; see graph)

Figure 4 . Maximising benefits from freshwater ecosystems



3. **Human Welfare** (Livelihood Analysis)
   VALUE - Quality of life is a human right having intrinsic moral priority independent of economic calculations
   - Health and sanitation – right to water
   - Agriculture – right to food
   - Culture – Right to cultural identity
     - Draft Resolution on Rights of Indigenous Peoples
     - Free and informed prior consent (WCD 2000)
     - Food sovereignty
     - Water sovereignty?
     - Health sovereignty?

4. **Nature's welfare** (Ecological Analysis)

   VALUE – Ecosystems have intrinsic value; rights of nature.

   - Religious perspectives (e.g., Alliance for Religion and Conservation)
   - Philosophy: Environmental Ethics, Deep Ecology (Naes)
   - Environmental Conservation (Leopold, Muir) and environmental NGOs (WWF, TNC, IUCN)
   - Indigenous Rights Movements (Kyoto Water Declaration)

Values in Water Decisions

- Disputes about water development reflect one of more of these ethical systems:
  - Conquest of nature
    - e.g., Conservation of wild rivers / regions
  - Economic efficiency
    - eg. calculating value of ecosystem services and socio-cultural factors
  - Human welfare - who wins and who loses
  - Nature's welfare
    - e.g., protecting the river's health

Varieties of Environmental Values

1. Human effects on Nature (“nature justice”)
2. Human effects on people (“social justice”)
3. Environmental effects on people (“environ. justice”)

Human impacts on Nature

1. Water Resources Management
   - Impacts on ecological function (dams, diversions)

2a . Irrigated Agriculture
   - Mode of Ag; scale, choice of crops; environ impacts on water ecosystems

2b. Urban/domestic
   - Mgmt and status of water ecosystems within urban landscape
   - Water conservation and footprint

2c. Industry
   - Impact on water ecosystem; conservation and water footprint

Social Justice

1. Water Resources Management
   - Governance equity and transparency

2a . Irrigated Agriculture
   - Wage scale; labor and land tenure arrangements; Ag and water subsidies (who benefits and how)

2b. Urban/domestic
   - Human right to water (water supply)

2c. Industry
   - Impact on other water users (equity in water sharing)

Environmental Justice

1. Water Resources Management
   - Human right to healthy rivers (e.g., Brazil)

2a . Irrigated Agriculture
   - Health effects on workers and consumers;
   - Cultural effects (identity)

2b. Urban/domestic
   - Safety of the water for people (water quality)

2c. Industry
   - Human impacts from mining, manufacturing (water quality, quantity)

Summary of Environ Water Ethics

	Nature/ Culture	**Social/ Governance**	**Environ Health**
WRM	Ecological function	Governance	Human impacts
Irrigation	Mode/style of Ag	Labor / land tenure	Health effects
Urban/domestic	Water ecosystems	Access to water	Safety of water
Industry	Eco-Impacts	Allocation / equity	Pollution impacts

Thank-you !