



A diverse and
sustainable world



IUCN
World
Conservation
Congress
Barcelona 2008

Presentation

**Presentation from the Water Pavilion at the IUCN World
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Environmental Flows and Human Well-Being

Water Pavilion, IUCN Congress in Barcelona
Tuesday October 7th, 2008
16:00 – 17:00

Michael Moore, SIWI
and
Anna Forslund, SWH/WWF



Program

16.00 – Welcome and Introduction

Michael Moore, SIWI, and Anna Forslund,
WWF/SWH

16.10 – Case studies

- The Nature Conservancy (TNC)
- Conservation International
- WWF

16.50 – Discussions

Setting the Scene

- Global Monitoring report warned in April 2008 that countries will fall short in meeting the MDGs, and stressed a need to strengthen the link between the environment and development
- 50 % of freshwater ecosystem has been lost during the last century
- It undermines the wellbeing for future generations as well as the livelihood of many rural poor directly dependent on these services.

Setting the Scene

- Challenge to balance environmental and development needs
- IWRM and Environmental Flows are tools to help make that balance

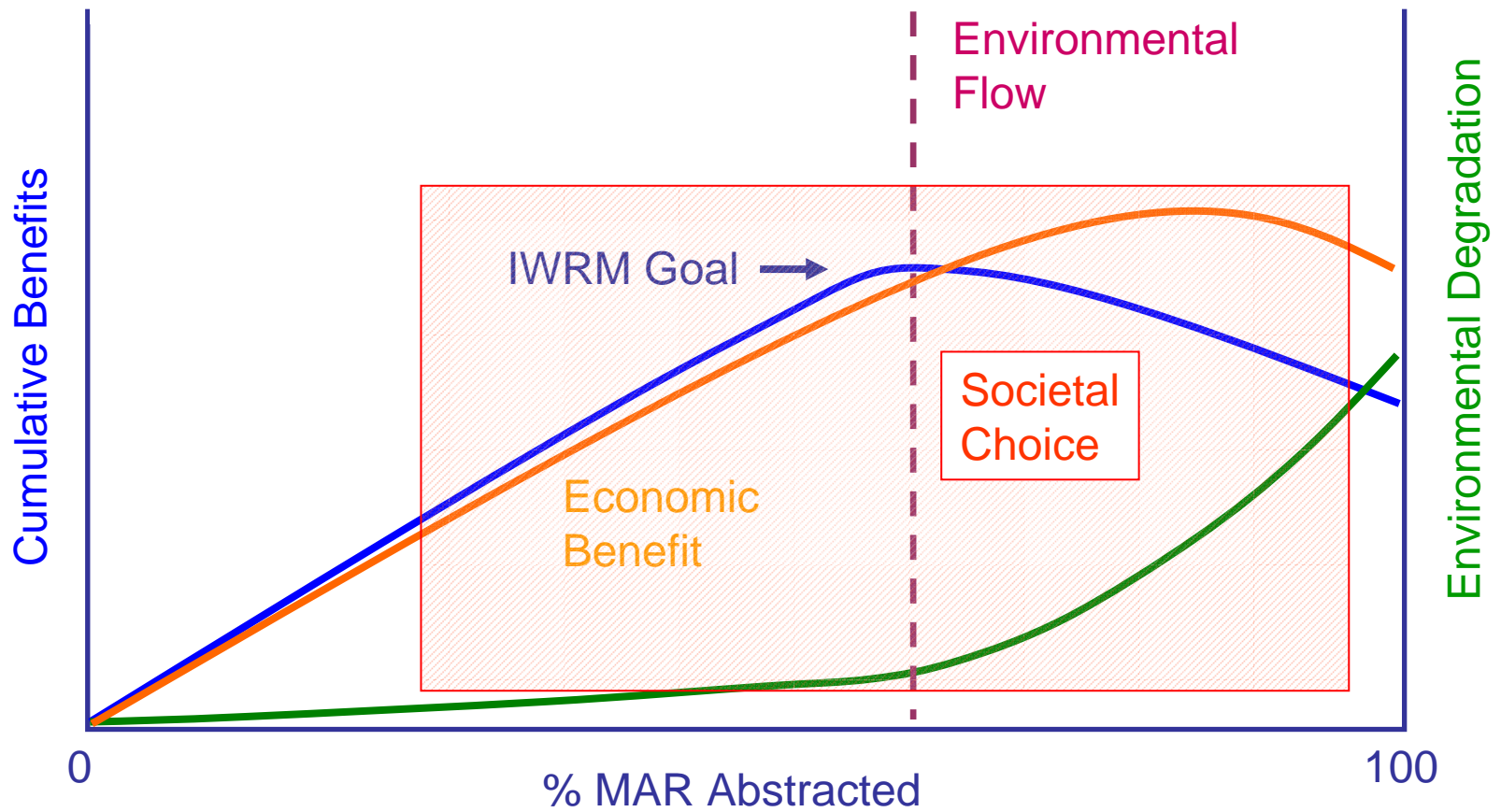
Integrated Water Resources Management

“is a process that promotes the coordinated development and management of water, land and related resources, in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems” (GWP, 2000)

Environmental Flow

“the quantity, timing, and quality of water flows required to sustain freshwater and estuarine ecosystems and the human livelihoods and well-being that depend on these ecosystems” (Brisbane Declaration, 2007)

Relationships between abstractions & benefits



River Functions and the Natural Flow Regime

Principle 3

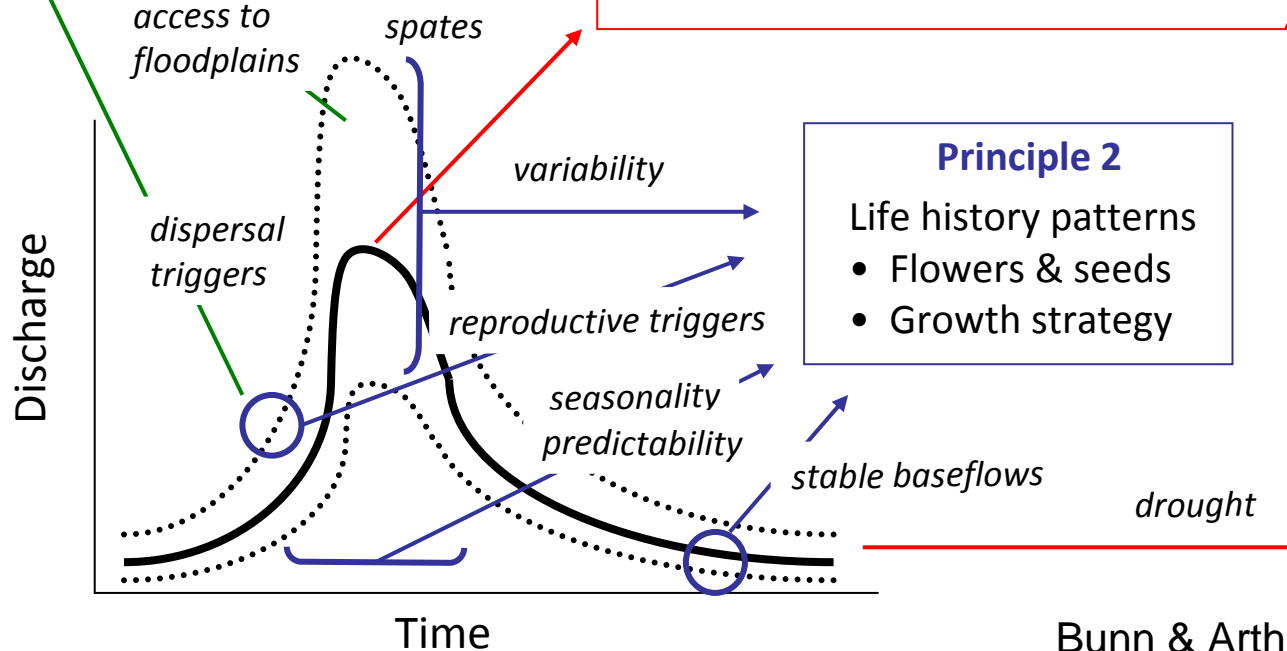
Lateral connectivity
Longitudinal connectivity

Principle 1

Channel form
Habitat complexity → Biotic diversity
Patch disturbance

Principle 2

Life history patterns
• Flowers & seeds
• Growth strategy



Principle 4

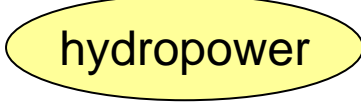
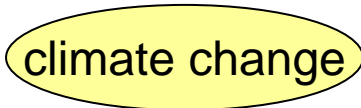
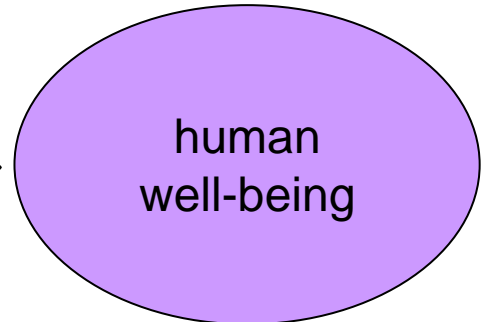
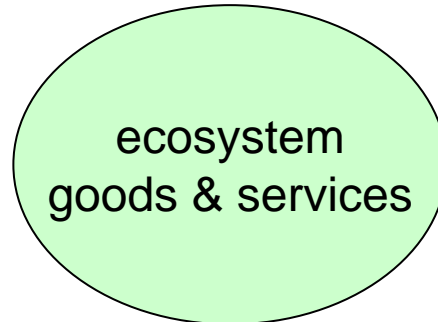
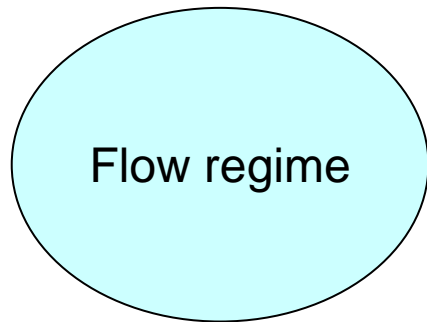
Natural regime discourages invasions

Bunn & Arthington 2002

Socio-Economic & Governance Context

- Magnitude
- Frequency
- Duration
- Timing
- Rate of change

- Health
- Basic material for good life
- Security
- Good social relations



- Water
- Food
- Biochemicals
- Pathogen Control
- Fiber
- Spiritual inspiration
- Recreation



Where's the evidence?

- Although linkages are well-recognised, can be difficult to find hard data on human well-being gains from restoration or maintenance of flow
- The values of securing ecosystem services are many times not well reflected in the global policy and poverty agenda (MDG, PRSP)

Yesterday, Today and Beyond

- www.eflownet.org
- World Water Week
- IUCN Congress
- Policy brief with contribution from different organisations