



eFlowNews - Volume 5 Issue 1

April 2008

Message to Newsletter Subscribers

Dear Members of the Global Environmental Flows Network, you may have received the eFlow Newsletter once or twice already. We are now sending it again as we have needed to solve some technical difficulties. We apologise for any inconvenience and will ensure that you will only receive one copy of the subsequent newsletters. The eFlownet administration (info@eflownet.org)

New logo and website



Welcome to The Global Environmental Flows Network's newsletter. We are happy to present the new logo and the website, www.eflownet.org, your gateway to information on environmental flows!

We invite you to try out our new and improved website. Please give us feedback in the Discussion Forum.

www.eflownet.org is designed for open access by anyone interested in environmental flows. It will facilitate communication, capacity building and education for expanding the recognition and adoption of environmental flows around the world. The website is dynamic and will grow and adapt to meet the needs of its members and keep pace with the dynamic and ever-increasing body of knowledge and experience around environmental flows.

www.eflownet.org has several featured services that are free for you to use:

Background info

Here you will find background information on eFlowNet and environmental flows.

News

Latest news will be shown on the website. If you have relevant news, kindly alert eFlowNet by using the online form or by contacting eFlowNet.

Discussion Forum

This is where we discuss all issues related to eflows. The Forum has topics, threads and replies. You are all invited to take active part in the discussions by starting new threads or replying to existing ones. The discussion is moderated to ensure high quality. You can receive daily and/or weekly digests from the discussion forum directly to your email account.

Resource Centre

The resource centre has large databases where you can search for documents, case studies/projects, training/education and other events. As activities related to environmental flows are rapidly increasing, your contribution to the resource centre is crucial to keep the information up to date.

You can submit and share information directly on the website!

Collaborative Platform

Here you can collaborate on projects, documents and ideas.

Members

The members' database is accessible to all registered members. Upon registration you decide whether or not you want your contact details to be displayed. The database is searchable and allows you to find fellow members in with a particular expertise in a specific region.

Regional Networks

Here you will find information on regional networks on environmental flows. This info will be updated regularly and new networks are very welcome to get their own link and develop their own part of the website.

Security and quality control

All the information submitted to eflownet is screened and approved by a network administrator before it goes online.

Your input is VERY important!

To make this site an up-to-date and active central reference point for information on environmental flows we rely on you! Please share information and make comments.

Thanks!

The Brisbane Declaration - a call for action on Environmental Flows

More than 750 scientists, economists, engineers, resource managers and policy makers from 50 nations gathered in Brisbane, Australia during the 10th International Riversymposium and Environmental Flows Conference. One of the main outcomes from the conference is the Brisbane Declaration.

The Brisbane Declaration

This declaration presents summary findings and a global action agenda that address the urgent need to protect rivers globally, as proclaimed at the 10th International Riversymposium and Environmental Flows Conference, held in Brisbane, Australia, on 3-6 September 2007.

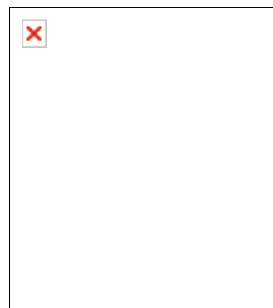
The conference was attended by more than 750 scientists, economists, engineers, resource managers and policy makers from 50 nations. Key findings include:

- Freshwater ecosystems are the foundation of our social, cultural, and economic well-being.
- Freshwater ecosystems are seriously impaired and continue to degrade at alarming rates.
- Water flowing to the sea is not wasted.
- Flow alteration imperils freshwater and estuarine ecosystems.
- Environmental flow management provides the water flows needed to sustain freshwater and estuarine ecosystems in coexistence with agriculture, industry, and cities.
- Climate change intensifies the urgency.
- Progress has been made, but much more attention is needed.

We hope you'll share this document with your colleagues as this document will be the most useful if it is disseminated far and wide, with your help.

Endorse the Declaration! We hope you take a minute to add your name to growing number of people calling for action.

Environmental Flows in India



The International Water Management Institute (IWMI) has recently published 3 research reports (RR) addressing the challenges of environmental flows in India. RR 107 describes a new desktop method based on flow duration curves. RR 114 introduces a prototype scoring system for ecological status of rivers, while RR 120 examines environmental flows aspects of India's National River Linking Project.

Research Report 107: An Assessment of Environmental Flow Requirements of Indian River Basins

The primary purpose of this report is to stimulate the debate about environmental flows in India, where this concept is only beginning to receive attention and recognition. It is a component of a larger research project which aims to assess multiple aspects of India's National River Linking Project and water future in general. The report first examines the emerging trends in environmental flows work in India and reviews desktop methods of environmental flows assessment, developed and used for preliminary planning purposes elsewhere. This allows common features of these methods to be identified and an alternative rapid assessment method to be formulated. The method takes into account the limitations of available hydrological and ecological information in India at present, but ensures that elements of natural flow variability are preserved in the estimated environmental flows time series, as required by the contemporary hydro-ecological theory.

The method is based on the use of a flow duration curve - a cumulative distribution function of monthly flow time series. The curve is calculated for several categories of aquatic ecosystem protection, from 'largely natural' to 'severely modified', and the required environmental flow volume and elements of flow variability are set to progressively reduce with the decreasing level of ecosystem protection. It is further illustrated how each estimated environmental flows duration curve can be converted into a continuous monthly time series of environmental flows using a simple spatial interpolation procedure. The final environmental flows requirement is therefore presented in two forms - as a flow duration curve and as a monthly flow time series. This makes it suitable for interpretation by ecologists, hydrologists and water resources engineers. Environmental flows requirements then evaluated using several major rivers, including Cauvery, Krishna, Godavari, Narmada, and Mahanadi, as examples.

The report discusses the advantages and limitations of the method and concludes with recommendations for a longer-term environmental flows research programme in India. The study does not intend to give prescriptions for environmental flows in India, but should rather be seen as a step towards the development of the future national environmental flows tools and policies.

Research Report 114:**Developing Procedures for Assessment of Ecological Status of Indian River Basins in the Context of Environmental Water Requirements**

This report attempts to introduce a prototype scoring system for the ecological status of rivers in India and illustrate the same through its application in several major river basins. The system forms part of the desktop environmental flows assessment (described in Research Report 107 above) and is based on a number of indicators reflecting both the ecological condition and sensitivity of a river. The indicators include: presence of rare and unique aquatic biota; diversity of aquatic habitats; presence of protected areas; sensitivity of aquatic ecosystems to flow reductions; percentage of a watershed and floodplain remaining under natural vegetation cover types; percentage of exotic aquatic biota; overall richness of aquatic species; degree of flow regulation and fragmentation; human population in the river basin; and the overall quality of water.

Each indicator has its own estimation method using available data and expert knowledge. Each individual indicator value is then converted to a standard scoring system, which include rating from 1 (none) to 5 (very high). The rationale of selecting each indicator is discussed including its relevance in the context of estimation of environmental flows requirement. The scores for individual indicators are then summed up and the sum of indicator scores is expressed as a percentage of the maximum achievable score. The approach is illustrated using several river basins in India, including Krishna, Cauvery, Narmada, Periyar and part of Ganga.

Research Report 120:**Hydrological and Environmental Issues of Interbasin Water Transfers in India: A case of the Krishna River Basin**

This report reviews hydrological and environmental sections of existing feasibility studies related to the National River Linking Project. The review reveals that the planning process, as presented, has not considered the variability of flow within a year. This variability is high in monsoon-driven Indian rivers. As a result, much more water may be perceived to be originally available at a site of transfer. The use of alternative techniques, such as low-flow spell analysis and a storage-yield analysis, to re-evaluate the surface water at proposed transfer sites is advocated. Furthermore, the report emphasizes that environmental flows requirements need to be calculated and explicitly included in the planning stage - similar to the demands of other sectors.

For more information about IWMI, please visit their new website at <http://www.iwmi.cgiar.org/>

Policy Brief: Environmental Flows and global strategies to reduce poverty

The Swedish Environmental Flow Initiative has formed a working group to produce a policy brief highlighting environmental flows as a tool to reduce poverty globally by protecting freshwater ecosystems and their goods and services

The policy brief will explore the link between environmental flows, ecosystem services, human health and the global poverty agenda such as the MDGs and PRSP. The primary target audiences are Aid Agencies, Foreign Departments, embassies in relevant countries and hydropower companies.

For more information please contact anna.forslund@swedishwaterhouse.se

Seminar on Environmental Flows and Human Health, 19 August 2008 at World Water Week

- a joint seminar between USAID Global Water for Sustainability Program (GLOWS), Swedish Water House, WWF, TNC, eFlowNet, DIVERSITAS, Global Water Systems Project, UNESCO IHP, and IUCN.

Human health, especially in rural areas of the developing world, is inextricably linked to the health of aquatic ecosystems. Human communities depend directly on goods and services of these ecosystems, including food to meet nutritional requirements, clean fresh water from springs, rivers, and lakes, and natural controls on pathogens and other pests.

These ecosystem services underpin all subsequent interventions promoted by health and hygiene programs, either supporting or counteracting them. They also strongly influence efforts to combat disease, prepare for climate change, and achieve Millennium Development Goals.

The fundamental requirement for maintaining aquatic ecosystem health is to maintain critical components of natural flow regimes, including quantity and quality.

We propose that this workshop explore progress toward coupling aquatic ecosystem and human health and prospects for improving human health by safeguarding and restoring aquatic ecosystems.

For more information, please contact; michael.mcclain@fiu.edu or anna.forslund@swedishwaterhouse.se

For more information about World Water Week - visit www.worldwaterweek.org



The Instream Flow Council is holding a conference on the Interdisciplinary Solution to Instream Flow Problems in San Antonio, Texas from October 7-9, 2008.

Science - Policy - Public Dialogue

Join The Instream Flow Council for an interactive conference in historic San Antonio

Find inspiration, tools, personal contacts and references to address instream flow issues in your community.

Conference Goal:

Advance the integration of science, policy and public dialogue related to instream flow and improve the ability of diverse stakeholders to cooperatively solve instream flow problems in the U.S. and

Canada.

Who should attend:

Biologists, hydrologists, attorneys/lawyers, engineers, educators, policy makers, consultants, and representatives of tribes, state/provincial and federal water and resource management agencies, universities, industry and interest groups. We encourage participation by parties representing all perspectives of water use issues.

Conference participants can expect to:

- Build personal skills related to collaborative decision-making through a workshop with world-renowned collaborative trainer, Larry Susskind.
- Learn about creative and interdisciplinary tools and approaches to instream flow problem-solving from across the United States and Canada.
- Explore the latest developments in instream flow science, policy and public dialogue in the U.S. and Canada
- Participate in one of three pre-conference workshops on October 6th.
- Contribute experiences to defining, developing and implementing collaborative strategies to improve instream flow problem-solving in the U.S. and Canada.
- Take home inspiration, tools, personal contacts and references to address instream flow issues locally.

For more information on Flow 2008, visit <http://www.instreamflowcouncil.org/>

International Conference on Implementing Environmental Water Allocations, 2009



The International Conference on Implementing Environmental Water Allocations is being held in Port Elizabeth, South Africa from February 23-26, 2009. Abstracts can be submitted until June 30, 2008.

INTERNATIONAL CONFERENCE ON IMPLEMENTING ENVIRONMENTAL WATER ALLOCATIONS

- For the formal announcement [click here](#)

23 – 26 FEBRUARY 2009

Feather Market Convention Centre, Port Elizabeth, South Africa

Organized by the
WATER RESEARCH COMMISSION (WRC), South Africa
and the
DEPARTMENT OF WATER AFFAIRS & FORESTRY (DWAF), South Africa

under the auspices of the
World Conservation Union (IUCN) and the
International Association of Hydrological Sciences (IAHS)

and with the support and co-operation of
SA National Biodiversity Institute (SANBI)
Department of Agriculture, South Africa
Department of Environmental Affairs & Tourism, South Africa

DATE AND VENUE

The conference will be held from 23 – 26 February 2009 at the Feather Market Convention Centre, Port Elizabeth, South Africa.

THEME

Promoting the sustainable use of rivers, wetlands, estuaries and groundwater

OBJECTIVES

Identifying and critiquing global trends in the implementation of environmental water allocations:

- policy and legislation
- integrating ecosystem protection with socio-economic development;
- defining and involving stakeholders
- decision making for sustainable use

- operational management of water allocations

Sharing knowledge and skills

TOPICS

Integrated management and use:

- Surface and ground water
- Water quality and quantity
- Biophysical and socio-economic

Institutional mechanisms:

- From local to international
- Stakeholder participation
- Training and capacity building

Decision-making and trade-offs:

- Awareness, policy and legislation
- In knowledge-poor environments
- Balancing development and resource protection
- Valuating ecosystem services

Delivering environmental water:

- Delivering floods
- Maintaining variability
- Constraints and solutions

Monitoring and adaptive management

CALL FOR PAPERS

Keynote speakers will address the conference topics. Oral and poster papers are invited. Intending authors should complete and return the accompanying template by not later than 30 June 2008

Papers/posters will be accepted on the understanding that the main author (or a co-author) will personally attend the conference as a fee-paying delegate and present the paper; and that the deadlines indicated below will be strictly adhered to. Papers will be subject to local and international peer review.

