

Promoting Water  
as a Catalyst for Peace  
through Capacity  
Building, Research and  
Technical Assistance

# from Potential Conflict to Co-operation Potential



UNESCO  
Division of Water Sciences  
1, rue Miollis  
F-75015 Paris, France  
  
Tel.: (+33) 1 45 68 41 80  
Fax: (+33) 1 45 68 58 11  
E-mail: [pccp@unesco.org](mailto:pccp@unesco.org)  
Website: [www.unesco.org/water/wwap/pccp](http://www.unesco.org/water/wwap/pccp)

A contribution of  
UNESCO's International Hydrological Programme (IHP)  
to the World Water Assessment Programme (WWAP)

2nd phase

UNESCO | IHP | WWAP





## Introduction

# 1

"Nature does not respect national borders; human beings seem incapable of managing their affairs without them<sup>1</sup>." The hydrological cycle is "primary example[s] of natural phenomena and processes that transcend national borders. Rivers, in particular are indifferent to the national borders that run across or along their banks; some rivers have the habit of meandering from their established courses, violating and distorting international

borders in the process. Underground aquifers and other water bodies, such as marshes and lakes, also often transgress national borders [...]. Thus transboundary water resources [...] raise three major concerns for the riparian states - sovereignty, territorial integrity and national security. The hydrology of an international river basin also links all the riparian states sharing it in a complex network of environmental, economic, political and security interdependencies, in the process creating the potential for [...] conflict as well as opportunities for cooperation among the neighbours<sup>2</sup>."

A close look at the world's international basins gives a greater sense of their significance in terms of potential for area conflict. There were 214 transboundary basins listed in 1978 (UN, 1978), the last time an attempt was made by an official body to delineate them; today there are approximately 263. Even more striking than the total number of basins is the breakdown of each nation's land surface falling within these watersheds, as well as the tremendous number of countries that share individual watercourses. Approximately one third of the 263 transboundary basins are shared by more than two countries. The competition arising from these already precarious geographical settings becomes even more acute when one considers the extent to which some countries are dependent on neighbouring countries for their source of water.

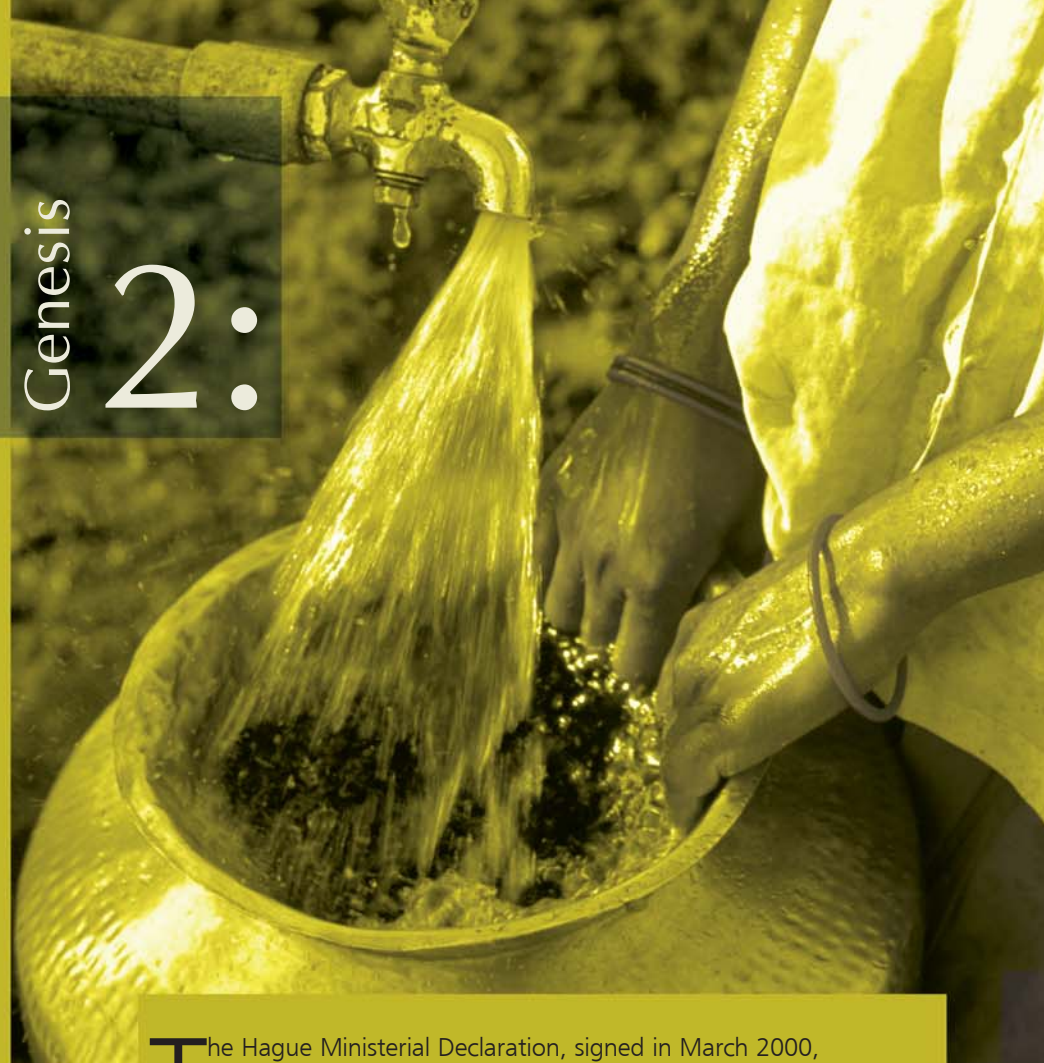
The challenges have become increasingly important as population growth and development drive demand for the limited resource higher and higher. Although progress has been made, the issue of sharing water has never been timelier. There is an escalating urgency to develop sustainable and equitable means of sharing a resource that is widely recognized as fundamental for all aspects of life. Access to it is, in fact, a prerequisite for the realization of a long list of human rights.

Between the Rio summit in 1992 and the World Summit on Sustainable Development in Johannesburg in 2002, the world's nations met in several major conferences organized by the United Nations. These conferences defined a global, comprehensive vision for the future of humanity. None of the statements or declarations





# Genesis 2:



issued, however, focuses exclusively on international freshwater resources nor embraces the notion of hydrosolidarity: the solidarity between riparian citizens of a watercourse in managing their water in the interest of all. And despite the efforts of the past decade to expand global institutional capacity over freshwater resources, no supranational agency as yet exists to manage transboundary resources on a global scale.

**Cooperation over water can be seen as an opportunity for some, and for others as a possible salvation from a severe crisis or potential conflict. When a clash of interests arises, it is often the first steps towards cooperation that are missing. PCCP's<sup>3</sup> overall objective is to enhance the capacity of stakeholders in seeking conciliatory ways to reach mutually accepted solution for the management of their shared water resources.**

<sup>3</sup>from Potential Conflict to Cooperation Potential.

The Hague Ministerial Declaration, signed in March 2000, identified 7 challenges that needed addressing in order to achieve 'Water Security' in the twenty-first century. These key challenges provide the framework for the World Water Assessment Programme (WWAP). Within this UN-wide initiative, UNESCO has launched the PCCP project. While the objectives of PCCP are relevant to all the challenges, the programme addresses specifically the challenge of 'sharing water resources'.

Guided by the principle targets of UNESCO, PCCP's underlying goal is to nurture the idea of peace in human minds by preventing and resolving conflicts arising from the mismanagement of shared water resources.



During its first phase (2001-2003), PCCP gave priority to those water conflicts of an international nature with the potential to cause tension or even open conflict between sovereign states. The programme has sought answers to two questions: What is preventing the political will, active public participation, empowered institutions and investments needed to avoid conflicts and achieve cooperative basin management? How can these obstacles and conflicts be overcome?

**A major outcome of the PCCP programme is the publication of a series of 31 printed volumes.**

**A number of experts from around the world were invited to investigate the water conflicts and cooperation field. They analysed historical experiences, and reviewed existing legal, diplomatic and systems analysis tools, particularly with regard to their utility in resolving water-related conflicts. Case studies of successful cooperation were developed in addition to educational material.**

**This series can be consulted at the following address:**

**<http://webworld.unesco.org/water/wwap/pccp/cd/index.html>**

Invaluable guidance and insight into the programme's thematic focus was also provided at the international conference: *From Conflict to Cooperation in International Water Resources Management: Challenges and Opportunities*, which took place in Delft in November 2002. During this conference, several hundred experts, government officials, international organizations, academics and NGOs gathered for three days of intensive debate. Among the major recommendations, the meeting identified the need for the creation of a facility to assist in the wise governance of shared water resources.

**The 7 challenges identified by the Ministerial Conference, The Hague, March 2002:**

- > Meeting basic needs
- > Securing the food supply
- > Protecting the ecosystems
- > Sharing water resources
- > Managing risks
- > Valuing water
- > Governing water wisely

**Additional challenges adopted by the WWAP:**

- > Improving the knowledge base
- > Water for energy
- > Water for industry
- > Water for cities



Purpose  
**3:**

The primary purpose of the PCCP project is to foster cooperation among the various stakeholders in the management of shared water resources in order to mitigate the risk that potential conflicts turn into real ones. The programme attempts to demonstrate that a situation with undeniable potential for conflict can be transformed into a situation where cooperation potential can emerge. It is in this context that PCCP aims to help parties involved in potential water conflicts to negotiate their way towards co-operation.

During its 2<sup>nd</sup> phase, PCCP has determined the following operational objectives to strengthen the capacity of the target audience in dealing with potential and actual water conflicts:

- The development of educational material related to conflicts and cooperation in the field of shared water resources;
- The development of appropriate institutional frameworks for the anticipation, prevention and resolution of water conflicts;
- The development of methodologies for conflict prevention and resolution;
- The improvement of legal tools for the management of shared water resources;
- The development of a comprehensive information system on water conflicts and cooperation;
- The dissemination of results and best practices.

**PCCP attempts to enhance water security by strengthening the capacity of stakeholders in the management of shared water resources to anticipate, prevent and resolve water conflicts.**



## Target Groups **4:**

The priority audiences of the PCCP project are institutions and individuals that manage shared water resources at local, regional and national levels. These include water professionals, decision makers and diplomats, civil society and local-level actors, educators at different levels, as well as post-graduate students:

- **Decision makers and diplomats** have the obligation to respect, protect and fulfil the enjoyment of the right to water by their citizens. They also have the power, through multi-track diplomacy, to mobilize public support, and the responsibility to include civil society in their decision-making.
- **Water professionals** have a leading role along with diplomats and policy makers in generating a discourse on the benefits of cooperation around water resources. They possess the capabilities to bridge the gap between governments and the public.
- **Civil society** networks have a crucial role to play in decision-making processes. These groups operate at a more local level, where conflicts related to water resources tend to be most intense. Therefore, their influence in water management is gradually increasing.
- **Educators at different levels** are at the centre of training the next generation of transboundary waters managers. The transfer of knowledge and experience, particularly from an interdisciplinary perspective, is essential in order to enhance future management skills.
- Today's **post-graduate students** in water studies are the water resources managers, planners, educators and decision makers of the future. They form a principal target group for the PCCP project.



PCCP is currently developing tools to support cooperation around, and reduce conflicts resulting from, difficult shared waters. These tools will contribute to the achievement of the operational objectives and be developed within three fields: Research, Education and Technical Assistance.

## Activities & Output 5:

### Research activities will concentrate on:

- The development of indicators of potential conflict and potential cooperation over shared water resources;
- Lessons to learn, from a number of real-world case studies, on both the root causes of conflicts and the successful cooperation in shared surface and underground water resources;
- The development of a decision support system capable of resolving conflicts involving sharing water, hydropower generation and flood protection;
- The production of a viable body of legal rules of interstate behaviour as an input to the work of the UN International Law Commission (in cooperation with the ISARM initiative<sup>4</sup>);
- The creation of a multi-level, geographic information system on international waters.

### Education

During the first phase of PCCP, the programme conceived and developed four short courses on 'Conflict Prevention and Cooperation in International Water Resources'. Pilot lectures of these courses were held in Maputo and Cape Town in late 2002. The courses are currently being adapted to other regions of the world. They will be

<sup>4</sup>International Shared Aquifer Resource Management



presented to both participants with experience in the natural sciences and engineering and those with sociological, legal public administration and economic backgrounds.

On the basis of educational and research material developed since the project's inception, a formal one-year programme for postgraduate students on water conflict prevention, resolution and cooperation will be created and hosted at the UNESCO-IHE Institute for Water Education in Delft, The Netherlands;

In addition, a computer game with the objective of introducing the basics of water management and teaching the benefits of cooperation over water is in development.

### Technical Assistance

There exists a strong potential role for international institutions that already facilitate and promote cooperation over shared water resources. What is needed, however, is an international facility where these institutions can coordinate their movements, share their expertise, and jointly develop tools. Recommendations to this effect were made at the Second and Third World Water Forums in The Hague, The Netherlands and Shiiga, Japan, and were reiterated in the World Water Development Report (WWDR). To answer this need, a Water Cooperation Facility (WCF) is being conceived. The WCF Secretariat would be provided by UNESCO and the World Water Council.

The WCF would be a neutral, non-governmental alliance of institutions that are already active in the management of shared water resources. It would, however, be multilateral and linked to the United Nations System. It would be managed by a coalition of institutions active in cooperative sharing of water resources. It would pull its strength from its members and would put the sum of their assets and experiences at the service of those of them needing support in their regional or local actions. The Facility would aim at reinforcing already existing actions by encouraging and managing communication among player-institutions, coordinating their data and tools, supporting their objectives, and, where pertinent,





evaluating their efficiency. Through these services, the Facility would uphold transparency, help avoid overlaps, and allow the achievement of fruitful partnerships.

The Facility could also directly support parties facing difficulties in managing shared water resources. Upon request of the parties, the Facility would guide them to work together to diagnose the problems, define their respective perceptions of a given situation, explore their interests, create options for managing difficult shared water issues, reach reasonable and achievable goals, produce agreements they feel ownership for, and implement these agreements. The WCF would counsel the parties to explore the reconciliation of their diverging interest before resorting to expensive and often unproductive approaches such as taking the case to court or continuing to struggle with the problems.

In order to be able to provide these services, the WCF would keep a small core staff that leverages worldwide networks of professionals, both individuals and institutions, which can be called upon to serve individual cases.

WCF will not be a court, nor will it be an arbitration institution. Rather, it will be an alliance that provides support for the management of shared water resources, based on an underlying principle of 'solidarity'.

**“More than almost any other resource issue, water continually confronts humans with their upstream and downstream, interdependency and calls humanity to greater solidarity. Indeed, the current call for integrated water management could be seen as a direct subsidiary teaching of [the] principle [of solidarity around water<sup>5</sup>].”**

<sup>5</sup> James c.I. Dooge, Jrome Delli Priscoll, Ramón Llamas, 2003, *Water and Ethics, Overview*, UNESCO.