WORLD CLIMATE PROGRAMME

RESEARCH • APPLICATION • IMPACT • DATA

WORLD CLIMATE PROGRAMME-WATER

MEETING OF REVIEW PANEL

(ESPOO, FINLAND, 21-22 AUGUST 1998)

FINAL REPORT

UNITED NATIONS EDUCATIONAL
SCIENTIFIC AND CULTURAL
ORGANIZATION

WORLD METEOROLOGICAL
ORGANIZATION

1. INTRODUCTION

1.1 The Seventh Planning Meeting of WCP-Water [Koblenz, Germany, 13-16 May 1997] considered potential changes to WCP-Water, and recommended the establishment of a Panel to review its aims and structure. This Review Panel met in Espoo, Finland on 21-22 August 1998, immediately following the Second International Conference on Climate and Water (CAW2); the conclusions and recommendations of which provided a basis for its work.

1.2 The following individuals participated in the meeting. Review Panel: A. Askew (WMO), M. Bonell (UNESCO), A. Hall (Australia), H. Lins (USA); Rapporteurs: Z. Kundzewicz (Poland), P. Pilon (Canada); Observers: J. Rodda (IAHS), J. Kuylenstierna (Sweden), and 0. Varis (Finland). A. Hall agreed to chair the meeting.

2. REVISION OF AIMS AND STRUCTURE OF WCP-WATER

2.1 Aims of WCP-Water

2.1.1 The Review Panel considered the draft goal and objectives prepared at the Seventh Planning Meeting and proposed the following revised version:

Goal: To promote hydrological activities in the World Climate Programme and related conventions, to provide the water community with current data and information on climate variability and change over a wide range of time and space scales.

Role: To provide the mechanisms to address the following objectives.

Objectives:

(a) to enhance understanding of the relationship between climatic and hydrological processes;
(b) to improve the availability of data required to achieve the objectives of WCP-Water;
(c) to enhance understanding of climate variability and change within hydrological systems and evaluate their impact on water resources systems;
(d) to promote more effective use of hydrological information linked with climate variability and change in water resources management;
(e) to promote more effective use of hydrological information in climate research, analysis and interpretation;
(f) to encourage closer collaboration between the hydrological and climatological communities;
(g) to encourage interaction among decision-makers and producers and users of hydroclimatological information in the provision of policy advice.

2.2 Structure of the programme

2.2.1 It was recommended that a Steering Committee be established to oversee the activities of WCP-Water, with the following composition and terms of reference:

(a) Composition

The Committee will be formally composed of a CHy Expert, an IHP Expert, and one representative each of the WMO and UNESCO Secretariats. Additional experts and

representatives of other organizations/programmes may be invited by the Committee to participate in its work. Preferably, the Committee should meet every two years, working via e-mail during intervening periods.

(b) Terms of Reference

(1) To advise WMO and UNESCO on WCP-Water activities and respond to the requests of their constituent bodies.
(2) To promote the use of WCP-Water in achieving the goals and objectives of other international programmes and conventions.
(3) Develop proposals for specific activities to be undertaken by WCP-Water, and to review and advise on their progress.

3. PROPOSED ACTIVITIES

3.1 The meeting considered the summary listing of activity areas and priority projects for WCP-Water as compiled by the Seventh Planning Meeting at Koblenz (1 3 to 16 May 1997). A very large numbers of topics were listed under the six activity areas. Some were addressed by projects that had been completed, for others projects were on-going. An even larger number of projects were either inactive or functioning primarily under the auspices of other programmes. The meeting likened these activities and projects to a set of pigeon hole, some where the pigeons had flown, a few of which were occupied by pigeons, but many more were empty. Participants agreed that this great diversity and range of projects had been the weakness of WCP-Water, and a sharper focus was now needed.

3.2 Discussion focused in detail on the six previous activity areas, A to F, and it was agreed to concentrate future activities of WCP-Water into two areas, namely:

A: Hydrological studies in the context of climate variability and change, and

B: Application of climate and enhanced hydrological information in planning, design and operation of water resource systems.

The first of these is briefly presented below, the other being reserved for future projects. It was also agreed that for the further development of WCP-Water, the Steering Committee would develop additional areas to encompass other activities.

3.3 Following the papers and discussions at CAW2, it was agreed that a sharper focus would be achieved best by placing emphasis on a single project directed at the analysis of hydroclimatic variability and change. This project would fall within new Activity Area A and is considered to be of fundamental importance. The project will focus on methods for detecting trends in a number of hydroclimatic variables, and for determining changes in moments, persistence, and seasonal behavior (e.g. flow regimes). In addition, multisite and multivariate tests will be utilized. It was also envisaged that the project would consider a wide range of other variables (e.g. water quality). Moreover, the preceding strategy could be expanded to include extreme hydrological events and the detection of point and areal trends at all scales.

3.4 Meeting participants decided that the Wallingford Workshop, scheduled for 2 to 4 December 1998, which will bring together about a dozen experts in trend detection, could be a vital element in streamlining WCP-Water. It is envisaged that, as a result of this workshop, a Steering Committee will be formed to initiate a concept plan and identify partnerships that could undertake various aspects of the plan. It was considered that one outcome of these efforts would be a workshop at the Sixth IAHS Scientific Assembly at Maastricht in July 2001. It was also proposed that this Steering Committee consider submitting applications for funding, such as to the European Union Fifth Framework Programme in the Environment and Climate Area. This or similar initiatives could bring together a number of partners for a three- to four-year programme of research centered on the detection of trends and change within hydrological time series. It could bring in partners and players from outside the European Union with relevant data and interest in the project.

3.5 It was also recognized during CAW2 that a critical challenge in hydrology is separating anthropogenic impacts, such as land-use change, from those attributable to natural climate variability. While such anthropogenic impacts are not the primary focus of WCP-Water, the Review Panel recommended that such complementary activities within the existing programmes of the UNESCO IHP and WMO should be strengthened and linked more closely with WCP-Water.

4. OTHER ISSUES

4.1 The previous structure of WCP-Water included both GRDC and GPCC as WCP-Water Projects. With the advent of a new WCP-Water structure this will no longer be the case. Both will, however, continue to operate under their own auspices and will continue to provide important support WCP-Water activities.

4.2 It was proposed that a WCP-Water homepage be developed as a means of increasing the visibility of the Programme as well as a vehicle for dissemination of information, data and methods related to the Programme's activities. H. Lins offered to prepare a draft version of the homepage for review by the WMO and UNESCO Secretariats prior to the Wallingford Workshop in December 1998.

Review Panel Meeting on World Climate Program-Water

Espoo, Finland, 21-22 August 1998

LIST OF PARTICIPANTS

Dr Arthur J. Askew
Hydrology and Water Resources Dept.
WMO
Case postale No. 2300
CH-1211 GENEVE 2
Switzerland

Tel: (41 22) 730 8479
Fax: (41 22) 734 8250
E-mail: Askew_A@gateway.wmo.ch

Dr Mike Bonell
Division of Water Sciences
Department of Earth Sciences
1 rue Miollis
75 732 PARIS CEDEX 15
France

Tel: (33 1) 4568 3996
Fax: (33 1) 4568 5811
E-mail: m.bonell@unesco.org

Dr Zbyszek Kundzewicz
Os. Raczynskiego 1/42
62-020 SWARZEDZ
Poland

Tel: (48 61) 817 5336
Fax: (48 61) 817 5336
E-mail: zkundze@man.poznan.pl

Dr Johann Kuylenstierna
Hydrology and Water Resources Dept.
World Meteorological Organization
Case postale No. 2300
CH-1211 GENEVE 2
Switzerland

Tel: (42 22)
Fax: (41 22) 734 8250
E-mail: Kuylenstierna_J@gateway.wmo.ch

Mr Alan Hall
17 Crisp Street
COOMA
NSW 2630
Australia

Tel: (61 2) 64 52 1920
Fax: (61 2) 64 52 1920
E-mail: hallalan@acr.net.au

Dr Harry F. Lins
U.S. Geological Survey
415 National Center
Reston, VA 20192
USA

Tel: (1 703) 648 5712
Fax: (1 703) 648 5070
E-mail: hlins@usgs.gov

Dr Paul Pilon
Environment Canada
Atmospheric Environment Branch,
Ontario Region
75 Farquhar Street
Guelph, Ontario
Nl H 3N4
Canada

Tel: (1 519) 823 4202
Fax: (1 519) 826 2083
E-mail: Paul.Pilon@ec.gc.ca

Dr John C. Rodda
Ynyslas
Brightwell cum Sotwell
106201.1774@compuserve.com
WALLINGFORD
Oxfordshire OXIO ORG
United Kingdom

Tel: (44 1) 491 83 75 39
Fax: (44 1) 491 82 69 85
E-mail:

Dr Olli Varis
Laboratory of Water Resources
Helsinki University of Technology
P.O. Box 5300
FIN-02015 HUT
Finland

Tel: (358 9) 451 38 44
Fax: (358 9) 451 3827
E-mail: ovaris@water.hu.fi