

Technical Paper: Climate Change and Water

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Technical Paper: "Climate Change and Water": www.ipcc.ch/meetings/session28/doc13.pdf



Background

- Request to IPCC Plenary 19 (April 2002) from WCP-Water and the Dialogue on Water and Climate for a Special Report before AR4 concluded
- Consultative meeting in November 2002 decided that a Technical Paper following AR4 would be of greater value.
- Scoping Paper submitted to IPCC 21 (Doc 9) November 2003



Timing

- Scoping process early 2006
- Authors selected late 2006
- First Lead Author meeting February 2007
- Government and Expert Review June-July 2007
- Second Lead Author meeting August 2007
- Government Review November-January 2007
- Final meeting of CLAs February 2008
- Technical Paper presented to IPCC Bureau 27 in April 2008, and finalised
- Currently being prepared for publication and will be handed over from WGII TSU to Secretariat on 1st July



Content

- IPCC guidelines require that Technical Papers are derived from:
 - Text of IPCC Assessment and Special Reports and the portions of material in cited studies that were relied on in these Reports.
 - Relevant models with their assumptions, and scenarios based on socio-economic assumptions, as they were used to provide information in those IPCC Reports
- Brings together all material from the three Working Groups of IPCC on freshwater and climate change, from all Assessment and Special Report
- In practice, most of the material is from the AR4, followed by the Special Reports on CO₂ Capture and Storage, and LULUCF



Scope

- The impacts of climate change on:
 - Hydrological processes and regimes
 - Freshwater resources (availability, quality, use, management)
 - Does not cover sea-level rise except insofar as this impacts on processes/activities in the coastal zone
- Current and projected regional key vulnerabilities and implications for sustainable development
- Prospects for adaptation
- Climate change mitigation measures and water

Table of contents

Executive Summary

1. Introduction to climate change and water
2. Observed and projected changes in climate as they relate to water
3. Linking climate change and water resources: impacts and responses
4. Climate change and water resources in systems and sectors
5. Analysing regional implications between climate change and water resources
6. Climate change mitigation measures and water
7. Implications for policy and sustainable development
8. Gaps in knowledge and suggestions for further work

References, Index, Glossary, Acronyms, chemical symbols, scientific units, Lists of authors and reviewers



Authors

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- **21 countries, 6 authors from WGI, 17 from WGII, 4 from WGIII**



Executive Summary

Observational records and climate projections provide abundant evidence that freshwater resources are vulnerable and have the potential to be strongly impacted by climate change, with wide-ranging consequences on human societies and ecosystems.

15 key statements covering:

- Observed and future changes in the hydrological cycle
- Changes in water supply quantity and quality
- Knock-on effects on food supplies and their utilisation
- Impacts on water infrastructure and management
- Adaptation options, integrated water management strategies, implications for other policy areas
- Mitigation
- Gaps in knowledge

