



Water in the Alps: Striking the Balance

3rd International Conference on Water in the Alps, 2010



under the patronage of the City of Venice



3rd Water Conference



- The X Alpine Conference (Evian, 2009), with the Decision B5, "takes note of the availability of Italy to organise in 2010 a conference about water in order to present the outcomes of this platform" (the Platform "Water Management in the Alps")
- The Italian Ministry of the Environment has organized the International Conference "Water in the Alps" in Venice (Venice International University) on the 25th and 26th of November 2010



Preparatory Workshops



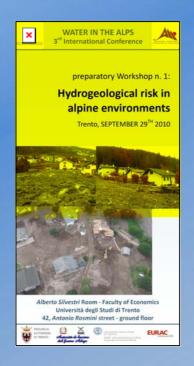
- Due to the importance of the event and in the spirit of the Alpine Convention which recommends the involvement of the local authorities, the Conference has been preceded by three Preparatory Workshops
- The Preparatory Workshops have been held in:
- Trento, 29th September 2010
- Torino, 13th October 2010
- Sondrio, 26th October 2010
- The Workshops have allowed to establish a link between local and international experts and Authorities



1st Workshop



Hydrogeological risk in alpine environment (29th September 2010, Trento)







1st Workshop - Trento



- The Workshop has allowed a comparison between the issues of PLANALP (Platform on Natural Hazards of the Alpine Convention) and of the Water Platform
- In particular the Workshop focused on how to conciliate the application of the EU Water Framework Directive (2000/60/CE) with the EU Flood Directive (2007/60/CE)
- The main issue was: how to deal with the hydrogeological risk (and in particular flood risk) maintaining the good status of waters?
- In such occasion experts both from the Alpine Convention's Platforms, the River Basin Authorities, the Local Administrations and the Universities, have had the occasion to discuss on strategies, experiences, practical cases, difficulties in the application of both the EU Directives



2nd Workshop



River Basin Management Plans as an instrument for the safeguard of the alpine mountain ecosystem and forests (13th October 2010, Turin)







2nd Workshop - Torino



- Main topics:
- the report performed by the Water Platform on the River Basins
 Management Plans and the gap in knowledge founded
- presentation of the Management Plan instrument with regard to the impacts of the water withdrawals and to the changes in water uses also considering climate change
- the River Basin Management Plans and the protection of the alpine wooded landscapes
- the forest planning and the woodland protection function
- lacks in Management Plans and possible solutions to the specific criticalities in water management
- the "River Contract" as instrument of integration and participation

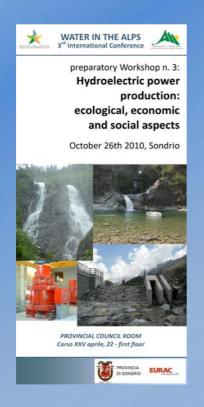


3rd Workshop



Hydroelectric energy production: ecological, economical and social aspects

(26th October 2010, Sondrio)







3rd Workshop - Sondrio



- Topics:
- environmental and landscape issues related to the exploitation of water in the Alps for hydroelectric purposes
- economic and social consequences to the hydroelectric exploitation in the alpine environment
- planning as an approach for the management in granting new hydroelectric authorizations
- "small" and "big" hydroelectric: differences, advantages and disadvantages, diffusion
- balance between economic and ecological (aquatic and terrestrial ecosystems) needs: new technologies and approaches in mitigation of ecological impacts (hydropeaking and residual flows)
- Strong involvement of the Water Platform:
- presentation of the "Common guidelines for the use of Small Hydropower in the Alpine region"



Water in the Alps



 The "Water in the Alps" International Conference has been held in Venice (Venice International University) on the 25th and 26th of November 2010





Water in the Alps: structure



- The Conference's structure was mirroring the Workshop's organization:
- 1° Session: "Hydrogeological risk in alpine environment"
- 2° Session: "River Basin Management Plans as an instrument for the safeguard of the alpine mountain ecosystem and forests"
- 3° Session: "Hydroelectric energy production: ecological, economical and social aspects"



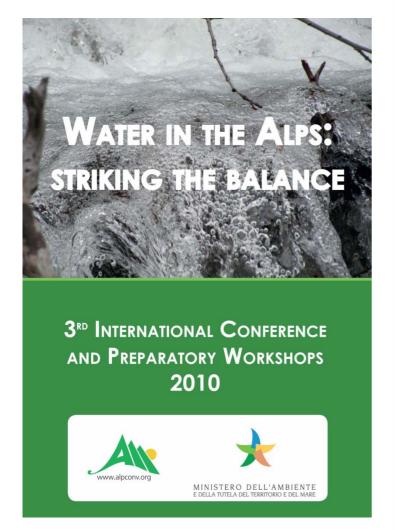
Water in the Alps: main topics



Main topics tackled:

- Workshops' outcomes reference and analyses
- integrated risk management
- main aspects and problems in water management
- water ecosystems safeguard in Alpine region
- the issue of artificial snowmaking
- environmental, landscape, economic and social aspects of the hydroeletric energy production
- the authorization process for hydroelectric power plants
- Water Platform's outcomes and recommendations, as well as recommendations of the Second Report on the State of the Alps
- main challenges and goals for the future

Conference's Partners and outcomes







































Publication of the proceedings and the outcomes



- The Italian Ministry of the Environment strongly wanted and promoted the publication of the proceedings and the outcomes of the Conference and the Preparatory Workshops
- A first draft of the publication has been presented during the 45th
 Permanent Committee and the XI Ministerial Conference of the
 Alpine Convention (Brdo prj Kranju, Slovenia, March 2011)
- The final version of the publication is now presented in two versions: English and Italian



Structure of the publication (1)



PREFACE

INTRODUCTION

- 1 HYDROGEOLOGICAL RISK IN THE ALPINE ENVIRONMENT
- 1.1 Natural hazards in the alpine environment
- BOX Debris flows in the Alpine region
- 1.2 Strategies for risk management
- 1.3 The legal framework
- 1.4 How to deal with hydrogeological risk: local experiences in the application of legislation
- 1.5 Future challenges
- BOX The legal framework and the application of the Water Framework Directive in Italy
- 2 RIVER BASIN MANAGEMENT PLANS IN MOUNTAIN ECOSYSTEM
- 2.1 Main impacts and pressures on water bodies located in Alpine areas
- 2.2 Major water management issues
- 2.3 Overview of the River Basin Management Plans in Alpine Countries
- 2.4 The Alps facing the challenge of changing water resources
- 2.4.1 The integrated approach in water management
- 2.4.2 The role of woods and riparian vegetation
- 2.4.3 Water cycle and the ecological functions of forests: a new approach to the analysis of the economic value of a river basin
- 2.4.4 Artificial snowmaking: economic, social and environmental aspects



Structure of the publication (2)



3 HYDROPOWER GENERATION IN THE ALPINE REGION

- 3.1.1 The hydropower generation in the Alps and future trends
- 3.1.2 Environment and landscape issues related to hydropower
- 3.2 Economic aspects of the hydropower use in the Alpine area
- 3.2.1 Environmental and economic costs and benefits
- 3.2.2 Corporate Social Responsibility (CSR) in the hydroelectric sector
- 3.3 Planning strategies for the sustainable and balanced use of hydropower
- 3.3.1 PTCP Sondrio
- 3.3.2 The evaluation of the environmental and social impacts of the hydroelectricity withdrawals: criticalities and perspectives in Valle d'Aosta
- 3.3.3 The CH2OICE project
- 3.3.4 The SHARE project
- 3.4 The common guidelines for the use of small hydropower in the Alpine region
- ANNEX 1 Outcomes of the Conference and the Preparatory Workshops
- ANNEX 2 Programmes of the events





You can find the publication, all the useful information, the presentations and the outcomes of the Preparatory Workshops as well as of the 3rd International Conference on the Conference's website

www.alpinewaterconference.it

Thank you for the attention