

GROUNDWATER DEPENDENT ECOSYSTEMS

NEW RESEARCH HORIZONS AND MANAGEMENT IMPLICATIONS





The AQUALIFE project, granted by the EU-funded LIFE programme has been developed to involve stakeholders and end-users working on groundwater and dependent ecosystems (GDEs) with the main aim to increase awareness and consciousness on the ecological dimension of groundwater bodies. The project analysed three main groundwater dependent ecosystems: saturated aquifers, the hyporheic zone of streams and rivers and groundwater-fed springs. The project incorporates another important aspect: the intrinsic value of groundwater biodiversity by setting a new index on the conservation priority of the GDEs at the site-scale. In this way, end-users will be able to assess the conservation priority of GDE-sites under their jurisdiction together with the risk to which they are subjected. This approach has been transferred into the AQUALIFE software which makes feasible and user-friendly the assessment of the Conservation Priority, the Biological Risk, the Hydrological/Hydromorphological Risk (for the hyporheic zone and springs) just entering your own data. The software will assign automatically all the scores to your sites for each indicator, thus supporting to set priorities for PoMs.

<u>Participation is free of charge</u>, a 2-days poster session is planned, and the most eminent scientists at the European scale will attend the Conference!

Participation is welcomed from stakeholders, end-users, policy-makers, citizens, environmental associations, biologists, hydrogeologists, environmental managers, SMEs, ONLUS organizations, representatives of other LIFE projects or other national or international projects dealing with groundwater and dependent ecosystems, by including also Groundwater Associated Aquatic Ecosystems (GWAAEs). Students interested to the topic are invited (1 ECTS will be assigned to them by rule).



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Preliminary Program

Wednesday 04.07.2018 - Conference venue

Auditorium del Parco - L'Aquila (15:00-19:30)

Registration of participants

Open Space Poster Session & Icebreaker

Thursday 05.07.2018 - Conference venue

Auditorium del Parco - L'Aquila

Morning Session (9:30-13:30)

Registration of participants and Welcome of the Authorities

Monica Di Francesco (former responsible of the AQUALIFE project at PNGSL) *Introductory lecture on the AQUALIFE PROJECT: Implications for the management of the Groundwater Dependent Ecosystems*

Marco Petitta (Earth Sciences Department, Sapienza University of Rome, Roma, Italy) *Positioning groundwater in European Agenda: a new interdisciplinary role for groundwater after the KINDRA project*

Anne Robertson (Department of Life Sciences, Roehampton University, London, United Kingdom) *Ecosystem functioning in Groundwater Dependent Ecosystems*

Christian Griebler (Helmholtz Center Munich, Institute of Groundwater Ecology, Neherberg, Germany) *A new tool-box for the assessment and monitoring of groundwater ecosystem status*

Tiziana Di Lorenzo (Institute of Ecosystem Study of the CNR, National Research Council of Italy, Florence, Italy) *Ecological risk assessment of pesticide mixtures in eleven GDEs of Abruzzo region: toward more realistic scenarios*

Ana Sofia P.S. Reboleira (Natural History Museum of Denmark, University of Copenhagen, Copenhagen, Denmark) *The dark side of human contamination – hidden impacts in subterranean ecosystems*

Diana M.P. Galassi (Scientific Coordinator of the AQUALIFE project, Department of Life, Health and Environmental Sciences, University of L'Aquila, L'Aquila, Italy) *The Biological Risk in the GDEs: methodological approach in the AQUALIFE project*

Lunch

Evening Session (15:30-18:30)

Simone Fattorini (Department of Life, Health and Environmental Sciences, University of L'Aquila, L'Aquila, Italy) *Assessing conservation priorities in groundwater dependent ecosystems using invertebrate vulnerability*

Giovanni Strona (European Commission Brussels, Belgium)

Florian Malard (Université Lyon 1, Université de Lyon UMR CNRS 5023 Ecologie des Hydrosystèmes Naturels et Anthropisés Ecologie, Evolution, Ecosystèmes Souterrains Villeurbanne Cedex, France)

Anton Brancelj (National Institute of Biology, Department for Freshwater and Terrestrial Ecosystems Research Department for Freshwater and Terrestrial Ecosystems Research)

Anna Menciò (Grup de Geologia Ambiental i Aplicada (GAiA), Department of Environmental Sciences, University of Girona, Girona, Spain) *Challenges in environmental impact assessment of groundwater ecosystems: combining hydrogeological and biological information*

Round table for defining the future direction of groundwater biomonitoring and conservation of the biodiversity

Friday 06.07.2018 - Field trip

Visit to the Stiffe Cave (9:30 - 15:00)