

IELRC-SOAS
WORKSHOP ON CLIMATE CHANGE AND GROUNDWATER – COMPARATIVE AND
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**GROUNDWATER LEGISLATION
AND REGULATION IN THE FACE
OF CLIMATE CHANGE – A
COMPARATIVE PERSPECTIVE**

Stefano Burchi
Chairman, International Association for Water Law (AIDA)

SALIENT FEATURES AND TRENDS

1. STEADY ATTRACTION OF GROUNDWATER IN THE PUBLIC DOMAIN/TRUST OF THE STATE, AND IN THE SCOPE OF GOVERNMENTAL (OR JUDICIAL) ALLOCATION AUTHORITY – ALSO AS A RESULT OF JUDICIAL PRONOUNCEMENTS (INDIA SC 2004, 2009) – HOWEVER pockets persist where groundwater is the private property of the overlying landowner (Finland; Portugal; Texas SC 2012)

SALIENT FEATURES AND TRENDS

2. STEADY ATTRACTION OF GROUNDWATER IN THE SCOPE OF REGULATION AS REGARDS
 - ❑ WELL DRILLING AND EXTRACTION/USE
 - ❑ POLLUTION CONTROL FROM "POINT" SOURCES
 - ❑ LAND USE IMPACTS ON NATURAL GROUNDWATER QUALITY
 - ❑ LAND USE IMPACTS ON NATURAL RECHARGE PROCESSES

3. RECOGNITION OF THE ECOSYSTEM-SUPPORT FUNCTION OF GOUNDWATER – CONTRIBUTING TO THE "GREENING" OF CONTEMPORARY WATER LAWS

SALIENT FEATURES AND TRENDS

4. INCREASING REGULATORY ATTENTION TO THE LAND/WATER INTERFACE, BORNE OUT OF -

- internalization of water/groundwater impact of land use planning determinations in the relevant regulation (e.g., “water assessment” prescribed by Dutch and Flemish town & country planning legislation; groundwater sustainability planning prescribed by SGMA California (2014); also Zambia WA 2011)

SALIENT FEATURES AND TRENDS

- regulation of cultivation practices giving rise to diffuse pollution of, in particular, groundwater from fertilizers and pesticides (e.g., EU Nitrates Directive 1991, Bhutan, Philippines)
- restrictions on land uses interfering with groundwater recharge processes (EU WFD; zoning of groundwater recharge areas under German, Tanzanian, Philippine, Barbados legislation; India's Model Groundwater Bill 2011. Note: green space compensation under Honduran WA 2009)

SALIENT FEATURES AND TRENDS

- ❑ empowering public water supply utilities to make land management agreements with landowners to protect upstream drinking water sources (PES/PWS in Scotland, England, New York Catskills)
- ❑ empowering public water supply utilities to compulsorily purchase parts of their groundwater source capture zones from landowners, and then permit farming or recreational use under licence (e.g., Denmark, England, Germany)

SALIENT FEATURES AND TRENDS

5. ENHANCED GROUNDWATER USERS' LEVEL OF RESOURCE GOVERNANCE, EVIDENCED BY CONTEMPORARY WATER LAWS PROVIDING FOR THE FORMATION AND FUNCTIONING OF FORMAL GROUNDWATER USERS' GROUPS FOR THE MANAGEMENT OF, IN PARTICULAR, GROUNDWATER UNDER STRESS

ISSUES EMERGING

1. In recognition of the strategic value of the resource, insulating/relieving groundwater's lifecycle from man-made stress on
 - available groundwater stocks
 - natural groundwater quality
 - natural recharge and discharge processes

ISSUES EMERGING

2. Raising the profile of the ecosystem-support function of groundwater in the competition for the allocation and re-allocation of available stocks to “utilitarian” uses and users

ISSUES EMERGING

3. Recouping the elusive connection between water (and groundwater) regulation and administration on the one hand, and land use regulation and administration on the other
4. Empowering users to play an active role in the groundwater governance architecture, with particular regard for groundwater under stress



THANK YOU!

Stefano Burchi

Chairman, International Association for
Water Law (AIDA)

stefano.burchi@gmail.com

www.aida-waterlaw.org