### T16P13 / Policy to Sustain Drinking Water

Topic: T16 / Sustainable Development and Policy
Chair: Zigmond Kozicki (University of Detroit Mercy)
Second Chair: Stephanie Baiyasi-Kozicki (Central Michigan University)

# GENERAL OBJECTIVES, RESEARCH QUESTIONS AND SCIENTIFIC RELEVANCE

This panel is concerned with identifying policies that sustain drinking water. Only 2.5 percent of Earth's water is fresh rather than salty, and only 1 percent of that is available to us in rivers, lakes and underground aquifers. And all of those sources are under grave stress worldwide (Spayde, 2011). Water scarcity already affects every continent. Around 1.2 billion people, or almost one-fifth of the world's population, live in areas of physical scarcity, and 500 million people are approaching this situation. Another 1.6 billion people, or almost one quarter of the world's population, face economic water shortage (where countries lack the necessary infrastructure to take water from rivers and aquifers (United Nations, 2015)

The panel should address the idea that drinking water is a limited resource. With the existing climate change scenario, almost half the world's population will be living in areas of high water stress by 2030, including between 75 million and 250 million people in Africa (United Nations, 2015). Policies that promote the management of drinking water and practice conservation of drinking water should be identified. In addition the impact of climate change should be included as a factor in the development of ongoing drinking water policies. Case studies of specific water emergencies should be included for consideration. Just as important are case studies of successful water management experiences. Papers should identify what constitutes acceptable water testing procedures and what should be included in the water quality index used by a community to certify water quality.

#### CALL FOR PAPERS

This panel is concerned with identifying policies that sustain drinking water. Only 2.5 percent of Earth's water is fresh rather than salty, and only 1 percent of that is available to us in rivers, lakes and underground aquifers. And all of those sources are under grave stress worldwide (Spayde, 2011). Water scarcity already affects every continent. Around 1.2 billion people, or almost one-fifth of the world's population, live in areas of physical scarcity, and 500 million people are approaching this situation. Another 1.6 billion people, or almost one quarter of the world's population, face economic water shortage (United Nations, 2015) With the existing climate change scenario, almost half the world's population will be living in areas of high water stress by 2030, including between 75 million and 250 million people in Africa (United Nations, 2015). Presenters are encouraged to consider how drinking water policy impacts the world economy. In addition how water policy can promote regional conflict.

Policies that promote the management of drinking water should be identified. The impact of climate change should be included as a factor in the development of ongoing drinking water policies. Case studies of specific economic and political conflict spawned by water emergencies should be provided. Just as important are case studies of successful water management experiences. Papers should identify what constitutes acceptable water testing procedures and what should be included in the water quality index used by a community to certify water quality.

Research Questions: Can government, private industry and the public be incentivized by policy to develop effective methods for maintaining safe and reliable drinking water for both humans and animals? What strategy will encourage private capital and or public taxes to be invested in providing enough drinking water for everyone on the planet?

Spayde, J. (2011). Top four threats to earth's water. Care2. United Nations (2015). International decade for action. Water sustains life. United Nations Department of Economic and Social Affairs. Human Development Report 2006. UNDP, 2006 Coping with water scarcity. Challenge of the twenty-first century. UN-Water, FAO, 2007 Retrieved from http://www.un.org/waterforlifedecade/scarcity.shtml

#### T16P13 / Policy to Sustain Drinking Water

Chair : Zigmond Kozicki (University of Detroit Mercy) Second Chair : Stephanie Baiyasi-Kozicki (Central Michigan University)

Session 1This panel is concerned with identifying policies that sustain drinking water.

Thursday, June 29th 10:30 to 12:30 (Block B 3 - 5 )

#### Discussants

Zigmond Kozicki (University of Detroit Mercy) Stephanie Baiyasi-Kozicki (Central Michigan University)

Survival of mankind requires Water Applied Testing and Environmental Research (WATER) Centers in each country.

Zigmond Kozicki (University of Detroit Mercy) Stephanie Baiyasi-Kozicki (Central Michigan University)

Social technologies to guarantee access to water for the rural population living in poverty: the Brazilian experience

Vitor Santana (Ministry of Social Development of Brazil)

# Watershed Based Policy Tools for Fostering Safe Drinking Water: Addressing Nutrient Enrichment and Harmful Algal Blooms in the United States

John Hoornbeek (Kent State University)

# Water Quality Index (WQI) is a realistic public policy to monitor and prevent drinking water related illness in North America.

Stephanie Baiyasi-Kozicki (Central Michigan University) Zigmond Kozicki (University of Detroit Mercy)