

#### Panel proposal (ID: 221)

Water governance in South America: transformations and implications in contexts of crises

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The twenty-first century is facing a global water crisis. In numerous places worldwide, there are crises involving water scarcity, eutrophication, drinking water and sanitation problems, among many others. South America is not an exception. In a context of rapid global environmental change and multiple water crises, attention to governance is critical since it can lead to the implementation of strategies for solving the problems.

The objective of this panel is to reflect upon the water governance trajectories in four South American countries (Brazil, Chile, Peru and Uruguay), where some of these crises are occurring, in order to identify challenges and opportunities for moving towards more desirable states.

The papers in the panel show signs of a gradual transition in the predominant water governance approach, which has been moving from the traditional and technocratic mode (prediction and control paradigm) towards a decentralized, participatory and potentially adaptive approach. National Water Policies (passed ten to twenty years ago - depending on the country) represent an enhancing legislation for this transition. Multi-stakeholder forums (such as water basin commissions or committees) composed of government and non-government actors have been implemented, and they show some elements of adaptive governance, although with numerous limitations to overcome. Polycentric institutional arrangements (with multiple centers of decision making, each operating with some degree of autonomy) are an essential component for adaptive governance, since the interaction across organizational levels can foster learning and increase the diversity of response options, and thus, the system could be better prepared to deal with uncertainty and change.

The papers in the panel also include cases in which water supply has been predominantly privatized (market mechanisms for water governance are prevalent in Chile) and cases where national legislation has been passed to maintain water provision in the public domain, after important societal mobilizations against privatization (in Brazil, Peru and Uruguay). Similarities and differences among the cases provide valuable opportunities for drawing lessons regarding water governance and the challenges of moving towards polycentric and adaptive approaches that can better tackle water scarcity and other crises.

Keywords: adaptive governance, polycentricity, crises, water scarcity, privatization





#### Panel proposal – related paper (ID: 221)

## Challenges to promote a common approach dialogue on water governance in São Paulo Macrometropolis (Brazil)

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#### ABSTRACT

Brazil has been suffering serious situations of water scarcity in several regions, and the most dramatic case was the recent (2014-2015) drought in the São Paulo Macrometropolitan region, which comprises more than 170 municipalities (including São Paulo metropolitan region) and more than 35 million inhabitants. Water scarcity in this region, due to increasingly unsustainable water use is affected mainly by two factors: the rise of climate impacts and pollution of water sources (linked to deficit sanitation services). This is directly related to the impacts of the ecosystems' deterioration caused by the asymmetric conditions of urbanization and unequal access to drinking water and basic sanitation.

This consideration leads us to dialogue with the contemporary debates on water as a commons or commodity, related to the dynamics of sharing of responsibility for water supply between the state, the private sector, and the citizens. These debates on the conflicting approaches over water supply governance take place between the public utility, the private sector, and a new culture of water based on strong considerations on sustainability and equitable access.

In this paper, we analyze the impacts of the water crisis and the potential of strengthening initiatives to advance in policies that emphasize a logic of commons.

The National Water Law in Brazil has existed since 1997. It incorporates modern water resources management principles. The need to manage conflicts arising from water use priorities led to incorporate civil society actors within "Water basin committees", created by this law. Water governance thus needs to tackle sustainability and social aspects, leaving behind the managerial perspective. In addition, the National Law defines the river basin as a territorial unit for water territorial planning, and water as a scarce resource, which has economic value, identifying multiple uses and user rights.

Two basins in São Paulo State – Piracicaba, Capivari and Jundiai rivers (PCJ) and Paraiba do Sul – are preliminary cases, which help us to inquire how the commons approach can be a component of public policies. Water governance requires inclusion, accountability, participation, transparency, predictability and response capacity to advance towards an agenda that incorporates a commons view of water, due to its emphasis on human rights. The challenge of a policy based on the commons is to strengthen an ethic of co- responsibility, reduce wasteful behavior and promote cooperative initiatives.



Keywords: Water Governance, Water Scarcity, Commons, Common Goods





#### Water governance transition in Uruguay: towards an integrated resource management approach

Néstor Mazzeo, Micaela Trimble, Cristina Zurbriggen and Guillermo Goyenola

Continental aquatic resource management in Uruguay has been experimenting a series of transformations associated to varied drivers of change. In terms of legislation, an important landmark has been a referendum in 2004, in which the society voted to approve a Constitutional Reform to leave water supply under the responsibility of the State; to define access to drinking water and sanitation as fundamental human rights; and to include citizen participation in planning, management and enforcement. The referendum was promoted by a non-governmental organization ("in defense of water and life"), which had been formed in 2002 after some State initiatives to privatize water supply. This constitutional reform laid the basis for a transition from a fragmented and technocratic approach towards an integrated management model.

In 2009, the National Water Policy was passed, institutionalizing a "sustainable, integrated and participatory management" of water resources in the country. Following this policy, two types of multistakeholder boards have been created since 2010, at different scales within the country (involving representatives of government agencies, users, and civil society): Regional Councils for Water Resources (3), and Basin and Aquifer Commissions (10). Additional bridging organizations have been formed to contribute to increasing cooperation and dialogue among government agencies (at different levels) and other actors. Also, a "National Water Plan" and a modification of the "Irrigation Law" (irrigation is the predominant water use) were passed in 2017, although with poor communication between them, indicating a still fragmented approach for policy design. Like in 2002, in 2018 there was social mobilization towards a referendum to vote for the derogation of the Irrigation Law (arguing that it allows privatization), but this time the number of signatures collected was not enough.

Concomitantly to these institutional changes, land-use transformations, such as the expansion of agriculture and forestry areas and the reduction of livestock areas (maintaining and expanding the stock), have contributed to diverse problems of water quality. These have been evident for the general population since two of the main reservoirs of metropolitan areas, and the associated water supply, have been negatively affected.

This paper analyzes the advances and challenges in the transition of water management paradigms in Uruguay, following national and local (watershed) analytical lenses. Regarding the latter, two Basin Commissions are analyzed: Laguna del Sauce (2011-2018) and Laguna del Cisne (2014-2018) lakes.

There has been an increase of interinstitutional and intrainstitutional cooperation, as well as of citizen participation, over the years, associated to the newly formed bridging organizations, which foster dialogue and learning among different actors. However, the transition from command-and-control towards integrated water management faces multiple challenges. One of this regards the prevailingly fragmented and reductionist university education, which hampers the incorporation of systemic and integrated approaches in decision-making and policy design processes. Several initiatives have emerged



in response to this fragmentation, such as interdisciplinary university degrees and inter and transdisciplinary projects.

(including those at SARAS). These challenges and opportunities are further explored in the presentation.

Keywords: 221, water, bridging organizations, multilevel governance, IWRM

Conference track: Multilevel and polycentric governance





### Panel proposal – related paper (ID: 221)

#### Resuming the debate on "common goods" and "the commons": Water governance in Peru

Maria Teresa Oré

The themes of "common goods" and "the commons" are currently garnering attention again international forums and Latin American political circles. "Common goods" refer to resources that belong to everyone and are characterized as vulnerable. They can be natural resources such as water, forests, and common lands but can also be material, cultural or institutional resources, linked to patrimonies and territories. All of these need to be preserved because of their importance to life and the social relations inherent in them. The term "commons" refers to the collective preconditions required to produce a good. Water, an emblematic resource, has both characteristics. It is a common good, although its consumption is private. Nevertheless, the manner of accessing this resource is characterized by being collective and demands a complex level of organization.

In Peru, the academic and political debate on common goods is closely linked to water due to the questioning of the statist model and the introduction of economic liberalization in the 1990s as well as the pressure of multinational organizations to privatize water, following the Chilean model. These led to national mobilizations of peasant organizations in defense of water as a "common good", and against proposals for a water law that considered water as an "economic good", a commodity to be bought and sold. These national mobilizations continued intermittently for almost two decades. Thus, water became an emblematic common good through resistance to its privatization. Finally, new legislation on water resources in 2009 did not privatize water, considering it a public common good and national patrimony. This temporarily ended the debate about whether water was a common good and the issue disappeared from the public agenda.

Why then has the debate on common goods and the commons reappeared and what relationship does it have to current water governance? Twenty-five years after the implementation of the new economic model and a decade after the new water resources legislation, what can we conclude about the economic model which provided more market participation and the current situation of common goods and, in particular, water governance? How has the new decentralization process impacted officials and the diverse actors with a stake in this resource regionally and locally? Why have socio-environmental conflicts related to water increased in recent years on the regional level?

The issue of the commons is relevant because of the participation and collective action of actors on the different levels of water governance. It is gaining greater importance because of the limitations of the statist model and the market in managing water resources. In addition, there are new problems that were not evident in the 1990s such as climate change, the increased recurrence of the El Niño phenomenon, climate variability, and especially the increased scarcity of water resources in various parts of Peru. This presentation resumes the 1990s debate on common goods and the commons in order to understand current water governance.

Key words: ID 221, common goods, the commons, governance, crises, water scarcity, privatization





Panel proposal (ID: 221)

# The hybrid social-ecological nature of water scarcity: the impacts of State strategies in the Province of Petorca, Chile

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Privatization has always been a traditional strategy in managing common-pool resources such as water. Consistent with its historical neoliberal orientation, Chile has been an exemplary case in using such an approach, and it currently offers one of the most complete implementations of market mechanisms for water governance. Lately, privatization has come under scrutiny, partly because of emerging doubts regarding its suitability to manage ongoing situations of water stress, such as those found in Chile, which are expected to worsen as a consequence of climate change.

Within public policy, however, water scarcity has been mainly understood as limited to a physical lack of water availability due to meteorological, hydrological, or agricultural factors. Governance-related aspects of water scarcity have been mostly ignored, as other socially-constructed sides of water scarcity, such as the economical or infrastructural inequalities, institutional and management deficits, and the socio- cultural perceptions it stands upon and often contributes to reproduce.

Acknowledging such hidden dimensions of water scarcity and its hybrid socio-ecological character, this research explores: (i) how State strategies that aim to eradicate permanent and temporal water deficits in Chile reconfigure the hydro-social territories, (ii) their interaction with the existing market-based governance framework, and (iii) whether they succeed in alleviating users who suffer from water scarcities.

We present preliminary results based on the analysis of how water scarcity and social-ecological resilience evolved between 2000 and 2017 in the Province of Petorca. This is a pre-eminently rural area in the central part of Chile, currently affected by the so-called mega-drought phenomenon, a recurrent and ever-increasing problem in the country, strongly related with climate change. Such results will be based on a mixed bottom-up and top-down empirical analysis of different dimensions of water scarcity: physical/ecological (water availability and land use), socio-economic (market transactions and prices, water uses and the inhabitants' financial means), political (territorial organizations, conflicts, decision-making processes, legal-administrative arrangements) and symbolic (water meanings, habits and uses).

Through this analysis, we highlight the political and equity issues raised by water management policies, and especially, their ability to eradicate not only physical, but also other forms of socially- constructed water scarcities. In addition, we problematize the suitability of Chile's market-based governance framework in a context of water stress, and how such governance reacts in light of State strategies aimed to alleviate water scarcity.

In conclusion, we offer a reflection on the opportunity and challenges of implementing more integrated, participatory and polycentric approaches to govern water, tackle its scarcity, and promote the resilience of the social-ecological systems.



Keywords: water scarcities, water governance, social-ecological system

Conference track: Multilevel and polycentric governance

