

## GovernAgua

# **Transforming water governance in South America:** from reaction to adaptation and anticipation

Supported by the Co-funded Small Grant Program "The role of ecosystem services in adaptation to global change for human wellbeing" (SGP-HW), of the Inter-American Institute for Global Change Research (IAI).

#### Research Team:

PI: Micaela Trimble (South American Institute for Resilience and Sustainability Studies, Uruguay).

Co-PIs: Pedro R. Jacobi (Institute of Energy and Environment, São Paulo University, IEE/USP, Brazil); Esteban Jobbágy (San Luis Institute of Applied Mathematics, IMASL-CONICET, National University of San Luis, Argentina); Miguel Pascual (Patagonian Institute for the Study of Continental Ecosystems, IPEEC-CONICET-CENPAT, Argentina).

#### Senior researchers:

Lydia Garrido (UNESCO Chair on Sociocultural anticipation and resilience, SARAS); Néstor Mazzeo (SARAS and Eastern Regional University Center - CURE-Udelar); Cristina Zurbriggen (SARAS and Faculty of Social Sciences-Udelar); Klaus Frey, Sandra Momm and Luciana Travassos (Federal University of ABC - UFABC, Brazil), Claudia Pahl-Wostl (Institute for Environmental Systems Research, University of Osnabrück, Germany); Riel Miller (UNESCO, France).

#### Other members of research team:

Victoria Marchesini, María Poca and Soledad Sallenave (IMASL, UNSL); Ana Liberoff, Natalia Pessacg and Franco Salvadores (IPEEC-CONICET); Juana Aigo (IDEAUS-CONICET); Lara Mac Donell (National Technological University-UTN, Argentina); Martín García Asorey (UTN Puerto Madryn); Silvia Flaherty (Universidad Nacional de la Patagonia San Juan Bosco); Gabriel Giordano (SARAS); Natalia Dias Tadeu (SARAS; IEE-USP); Beatriz Milz and Pedro Henrique Torres (IEE-USP); Daniele Tadeu, Lidiane Alonso and Rosana Laura (UFABC); Marila Lázaro (Faculty of Sciences, Udelar); Anahí Urquiza (Faculty of Social Sciences, University of Chile, Chile); Silvia Benítez (The Nature; Conservancy - Latin America, Ecuador); Tomás Olivier (Institute of the Environment and Sustainability, University of California - UCLA, USA).













### **Project Partners:**

Global Water Partnership (GWP) South America **UNESCO International Hydrological Program** ICLEI South America - Local Governments for Sustainability The Nature Conservancy (TNC)

National Directorate for Environmental Management of Water and Aquatic Ecosystems (Argentina)

Provincial Institute of Water of the Province of Chubut (Argentina)

Ministry of Environment and Control of Sustainable Development (Chubut, Argentina)

Ministry of Environment, Countryside and Production (San Luis, Argentina)

AGEVAP Agency (Association for Water Management of the Paraíba do Sul River Basin, Brazil)

PCJ Basin Agency (Agency for Piracicaba, Capivari and Jundiaí River Basins, Brazil)

National Secretariat of Environment, Water and Climate Change (SNAACC, Uruguay)

National Directorate of the Environment (DINAMA-MVOTMA, Uruguay)

National Water Directorate (DINAGUA-MVOTMA, Uruguay)

**Duration:** 2 years (June 2019 – May 2021)

## **Executive Summary**

Water as an ecosystem service interconnects spaces (territories, fluvial networks, villages), domains (ecosystem and administrative), uses (domestic, productive, recreational), temporalities (past, present and future), actors (each with their visions, interests and powers) and different ways of generating knowledge. Crises in the provisioning of water services arise in a context of global and local changes and they represent windows of opportunity for learning and transformation of governance systems based on collaboration, the co-creation of knowledge and building shared meaning. However, most of these crises only translate into reactive and ephemeral actions that fail to stimulate learning, anticipation and resilience.

The aim of this project is to improve the provisioning of ecosystem services and human wellbeing associated with water, by advancing anticipatory water governance in South America. This will be achieved by strengthening the actors' ability to anticipate and adapt, as well as improve their ability to co-create knowledge. The objectives of the project are to: (1) systematize learning through a comparative analysis of water governance in six watersheds in Argentina, Brazil and Uruguay (two from each country), especially in relation to crises of water supply, water scarcity and water regulation, understanding these crises as windows of opportunity for management transformations and knowledge generation; (2) strengthen the ability to anticipate change and the consequences of decisions made by people, groups and institutions in three in-depth case studies (Río Chubut -Argentina; Rios Piracicaba-Capivari-Jundiaí - Brazil, and Laguna del Sauce - Uruguay) for an adaptive and anticipatory system of water governance; and (3) in these three watersheds we will lay the











foundation for a system of experimental anticipatory governance with the participation of the various actors operating as a collective intelligence system that reports local, national and regional policies, who have the ability to anticipate and transform the problems of the watersheds. These objectives are in line with international frameworks (Paris Agreement, Sustainable Development Goals, Strategic Plan for Biodiversity 2011-2020) and national frameworks (e.g. Water Plans).

The project adopts a transdisciplinary research approach, with integration of local knowledge, technical knowledge and various scientific disciplines. Involvement from different sectors and actors is crucial to understanding and solving the problems which affect the quality, quantity and temporal availability of water for human and ecosystem use. The team, involving researchers, governmental and non-governmental institutions, will co-construct a conceptual-analytical framework for the project and exchange perspectives throughout, in order to review and adapt the proposed methodologies as needed in each case. The project utilizes a mixed methods approach, combing qualitative and quantitative methodologies. The comparative analysis of multiple case studies, with different socio-ecological contexts, will provide lessons usable to other watersheds. Likewise, the project's outputs (for example, a protocol or pilot guide for governance and anticipatory action) will be designed to be useful in other countries of the continent.

For more information about the project, please write to: governagua@saras-institute.org





