

Living Lab Caplina-Mauri-Desaguadero System

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TRANSFORMATIONAL AND ROBUST
ADAPTATION TO WATER SCARCITY
AND CLIMATE CHANGE UNDER DEEP
UNCERTAINTY
[TRANSCEND]

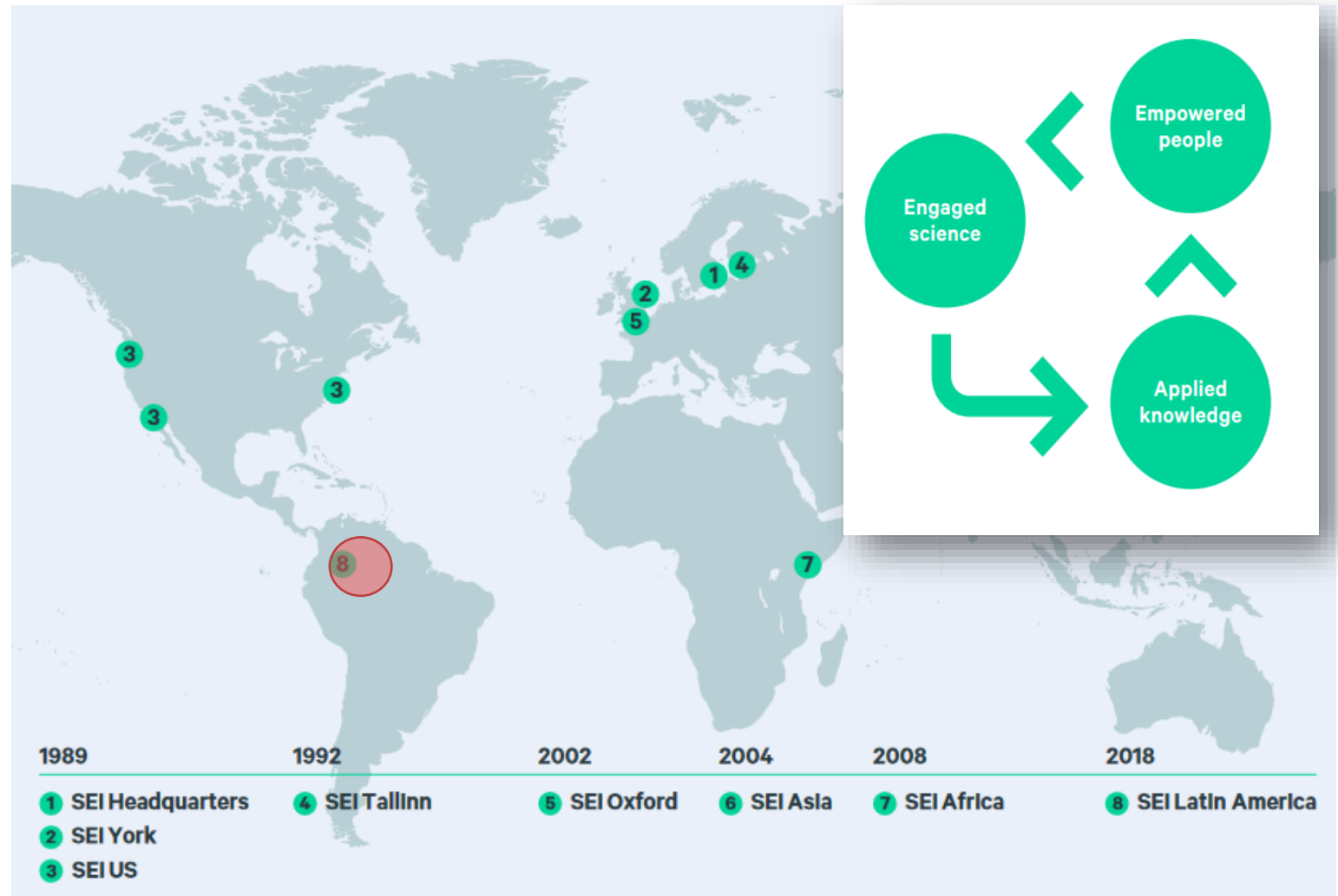


European
Commission

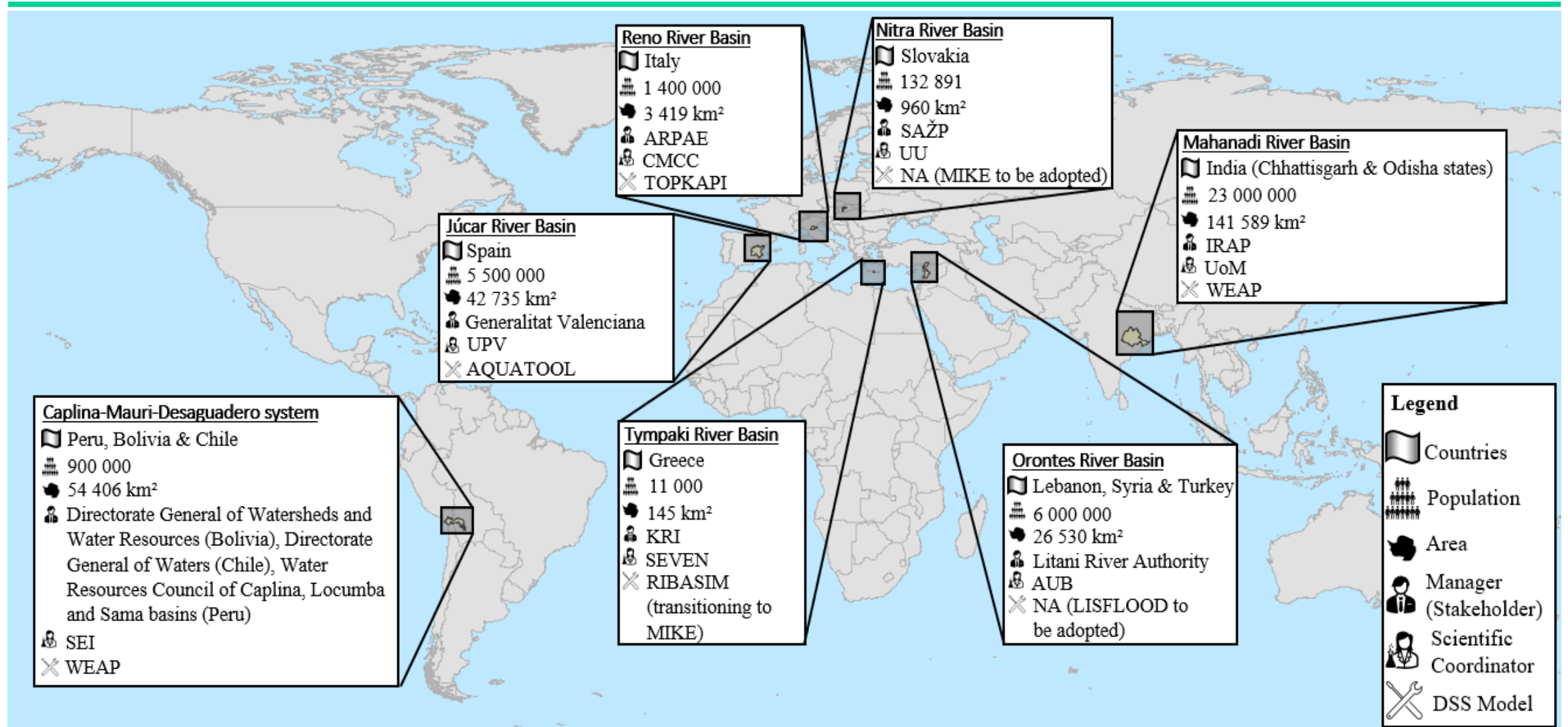
Bringing Science and Policy

“Decisions made over the coming five years will determine mankind’s living conditions for decades ahead. SEI’s enhanced focus on impact and strategic policy engagement reflects this urgency.”

Måns Nilsson, Executive Director

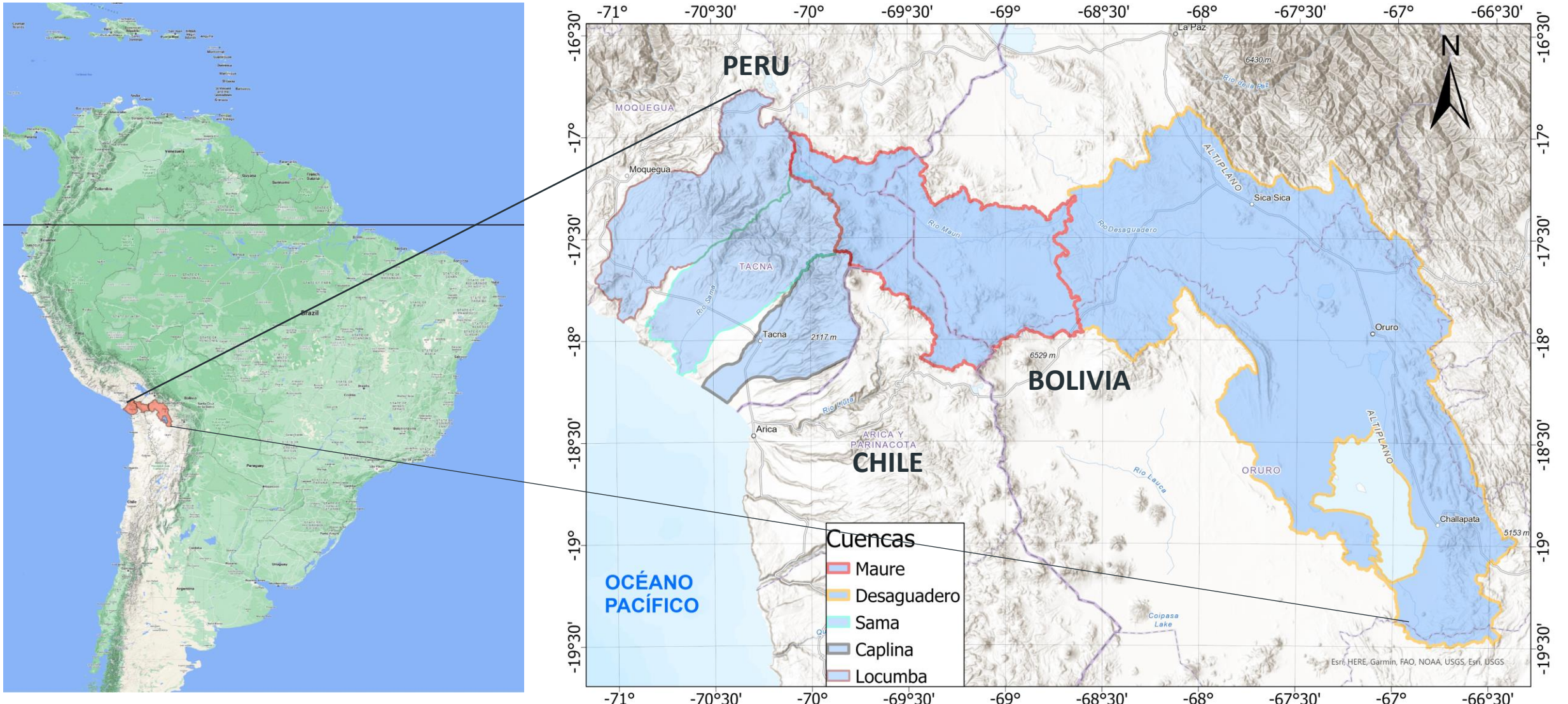


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Case Study Latinamerica

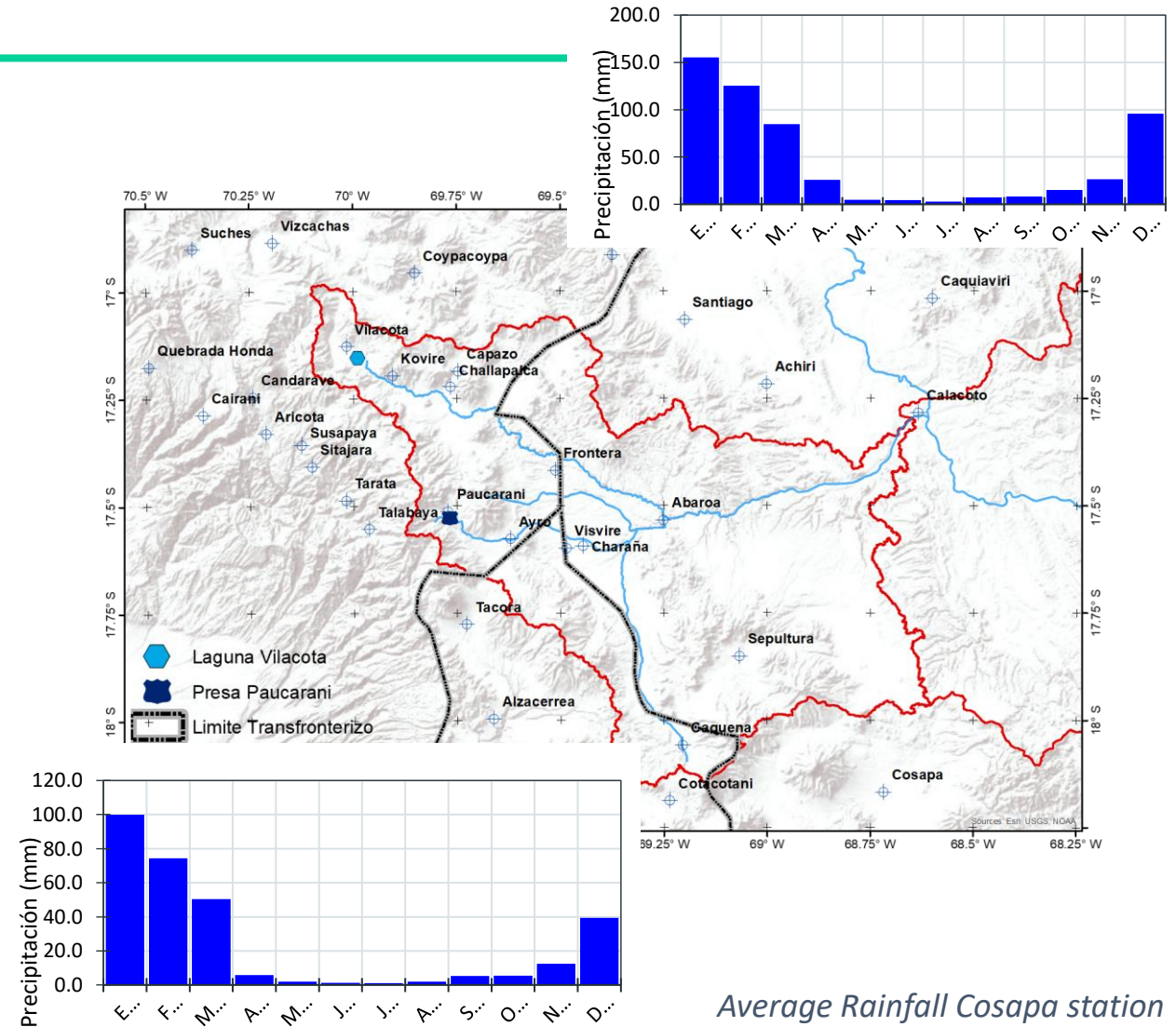
Caplina-Tacna, Maure-Mauri, Desaguadero

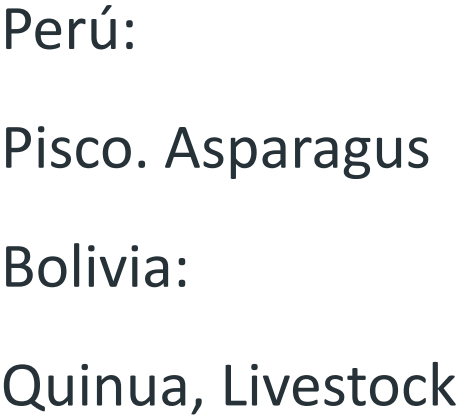


Biophysical features

Caplina-Tacna, Maure-Mauri, Desaguadero

Countries	Peru, Bolivia, Chile
Area (km2)	54 410
Altitud(m.a.s.l.)	0-6300
Rainfall (mm/year)	135-588
Temperature (C)	-9 to 38





Inequity water distribution



The water
in the
watershed



Water
transfers



The
transfer
water Vs
the
watershed
water



Tacna
Educational
purposes

Sensitive ecosystems and communities

Bofedales, Cameloids. Indigenous

Lake Poopó

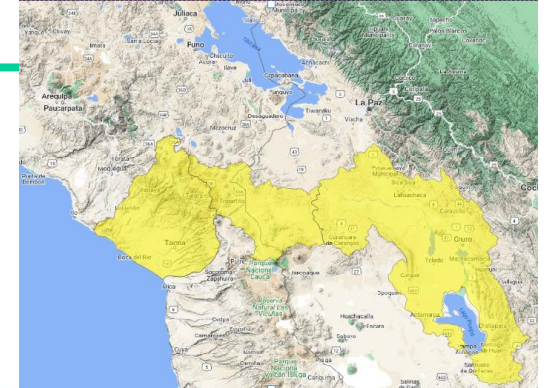
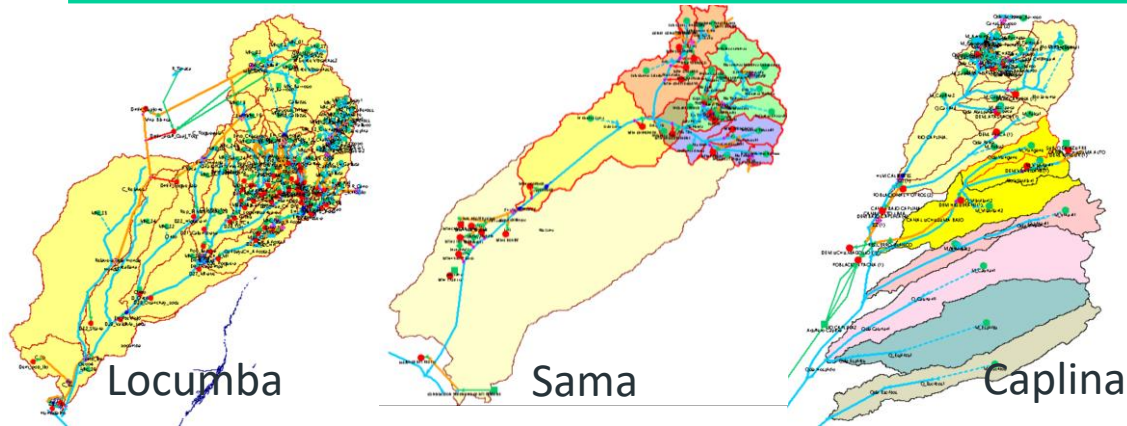


Photo: Diego Renza (<https://www.researchgate.net/profile/Diego-Renza>)

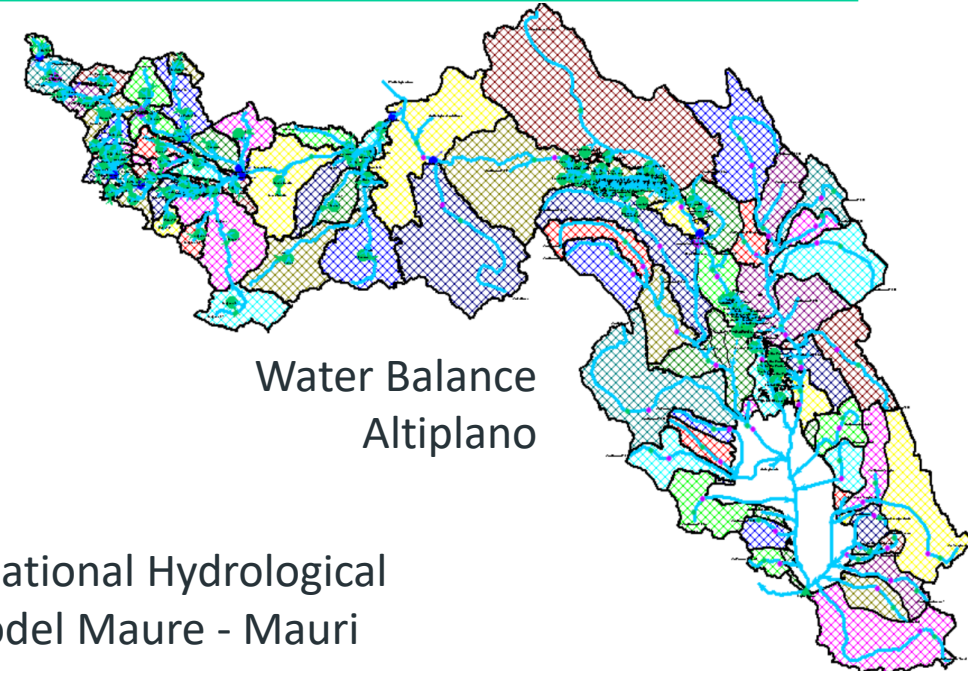
Water resource models

Objetivo: Tools for Basin
National Plan MMAyA
[Ministerio de medio ambiente,
Bolivia]

[WEAP]

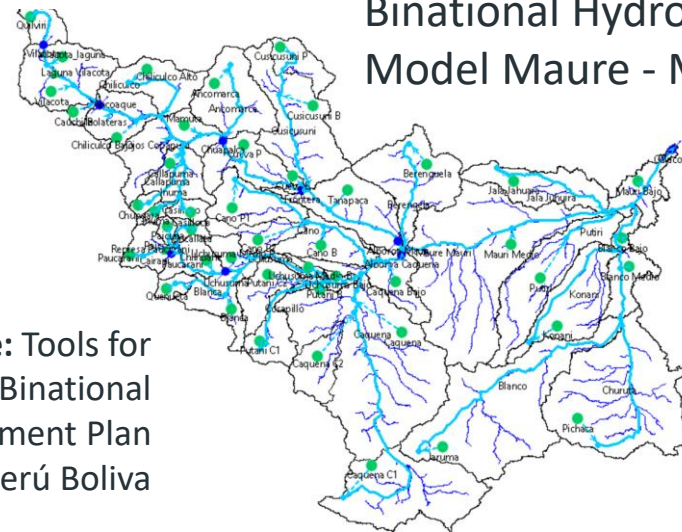


Objetivo: Tools for
Water Resource
Management
Plan, Tacna. ANA
[Autoridad Nacional del
Agua, Perú]



Binational Hydrological
Model Maure - Mauri

Objetivo: Tools for
Binational
Management Plan
Perú Boliva



Political situation

Challenges

Perú and Bolivia civil movements

Political instability

Chile is not committed to be part of an international agreement

Internal agendas and priorities



Manifestantes se enfrentan a la policía durante la marcha de este jueves, en Lima.**PILAR OLIVARES (REUTERS).**

<https://elpais.com/internacional/2023-01-19/protestas-en-peru-en-vivo.html>



Seguidores del líder opositor y gobernador de Santa Cruz Luis Fernando Camacho se arrodillan durante una protesta en una barricada en Santa Cruz, Bolivia, el 3 de enero de 2023. (AP Foto/Juan Karita)
(Juan Karita / Associated Press)

Political situation

Opportunities

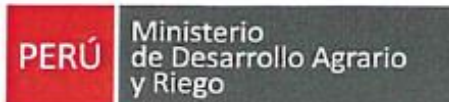
1. Institutions committed to be part of this initiative

- Agriculture and irrigation Ministry, National Water Authority, River Basin Council, TACNA:Caplina Lucumba Watershed. Perú
- Environmental Ministry of Bolivia
- *National Directorate of Borders and Boundaries (DIFROL)* of the Republic of Chile
- Binational Authority Titicaca Lake, Desaguadero River, Poopo Lake and Coipasa salar.(Perú-Bolivia)

2. Technical tools to inform:

Integrated Water Management plan Caplina Lucumba

Pluriannual Management plan Perú-Bolivia Maure-Mauri



ESTADO PLURINACIONAL DE
BOLIVIA

MINISTERIO DE
MEDIO AMBIENTE Y AGUA



Next steps

1. Integration of models
2. Inclusion of sensitive ecosystems and communities: Lake Poopo, Lake Titicaca, Bofedales, Camelidaes
3. Definition of Adaptation Actions: Actions to adapt economical activities and ecosystems to climate change, droughts, water allocation inequalities.
4. Transformational Adaptative Policies TAP: definitions, assessment, scenario comparison (including extreme events and climate change scenarios), and recommendation to stakeholders

TAP to be assessed and updated

-Inter-regional water allocation agreement, including groundwater;

-Treated wastewater reuse, desalination;

-Drought insurance & mutual funds;

-Expand nature-based water retention areas and effective cost-recovery.

-Robust decision support tools and methodologies to inform plans about the benefits of TAPs

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[Products and Schedule]

Products	Month
Anual local workshops	8,19,30,36
International workshops	25,42
Reportes de Cocreacion	14,23,36,43
Modeling suite - beta version	13
Base de datos intermedia de simulaciones	25
Toolbox - beta versión [WEAP]	12
Base de datos de Escenarios	25
Contabilidad intermedia y evaluación de impacto - Database	40
Draft white paper: Governance	6
Draft white paper: Financiamiento	17
Draft Notebook de Politicas	47
Virtual Forum launched	3
Escuelas de verano	24, 36
Eventos de ciencia ciudadana	20,40
Borrador del plan de negocios	32
Kick-off and General Assemblies	2,12,24,35,48

Gracias

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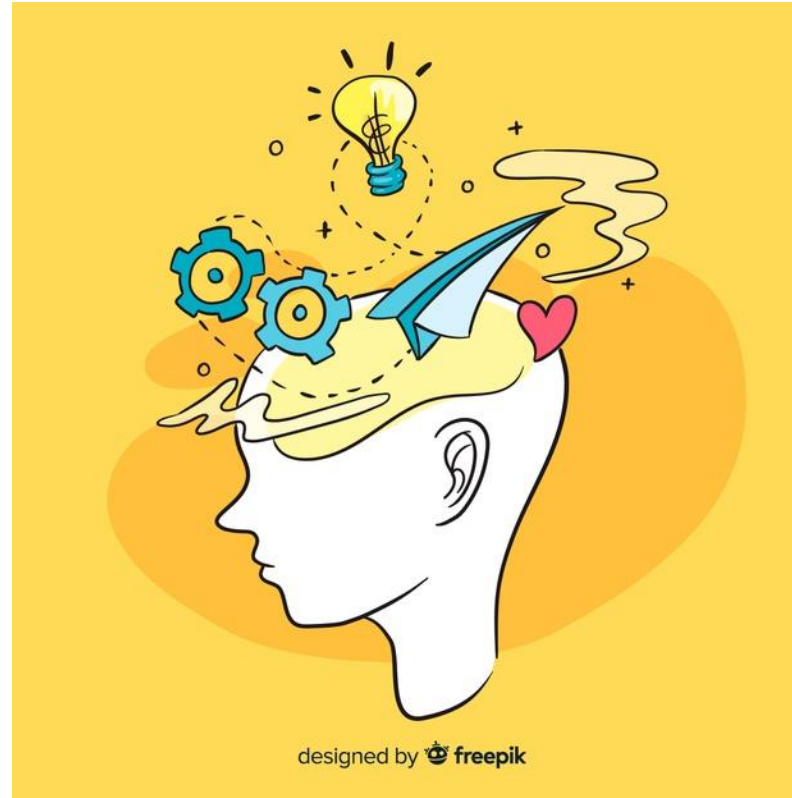
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www.weap21.org

<https://www.sei.org/centres/latinoamerica/>



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