

9th World Water Forum, Dakar 2022

Session 1F3

Climate change in the Mediterranean islands: the case of Corsica (France)

Antoine ORSINI

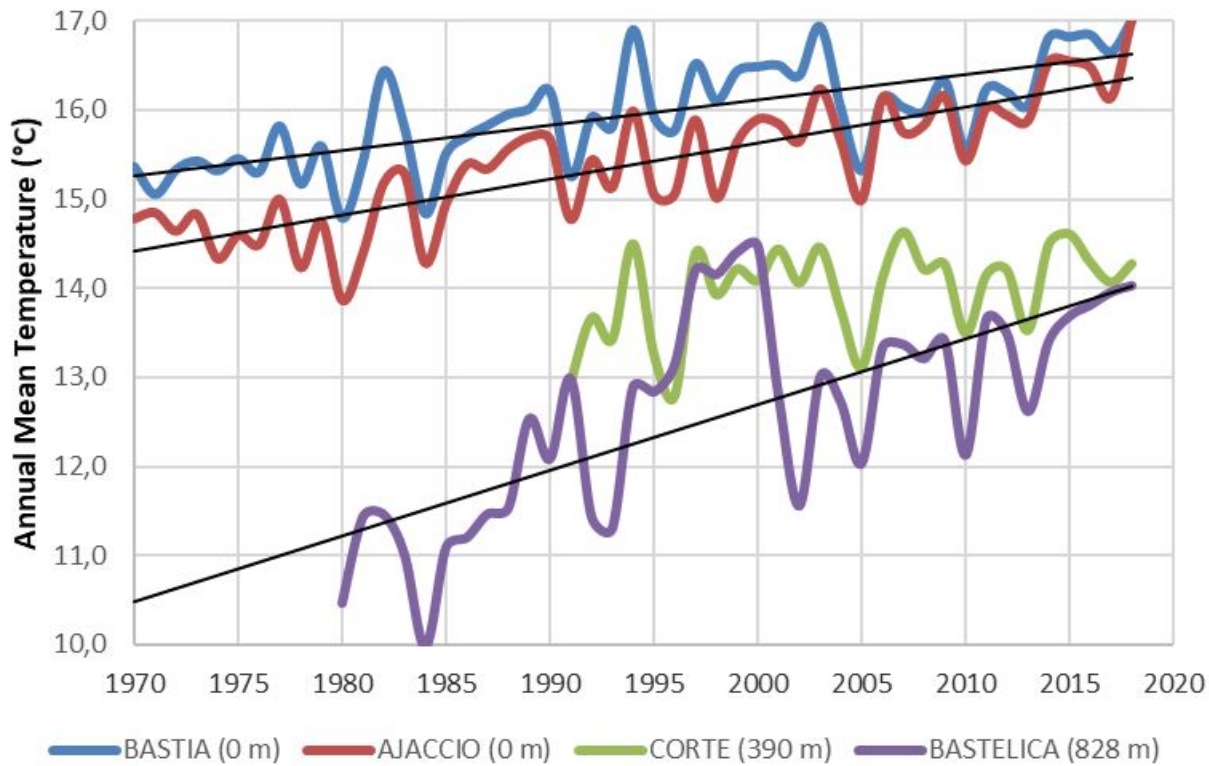
Hydrobiologist at the University of Corsica

Administrator of Rhône-Mediterranean-Corsica Water Agency

Member of the Corsican Basin Committee (France)

President of the Community of Communes of Central Corsica

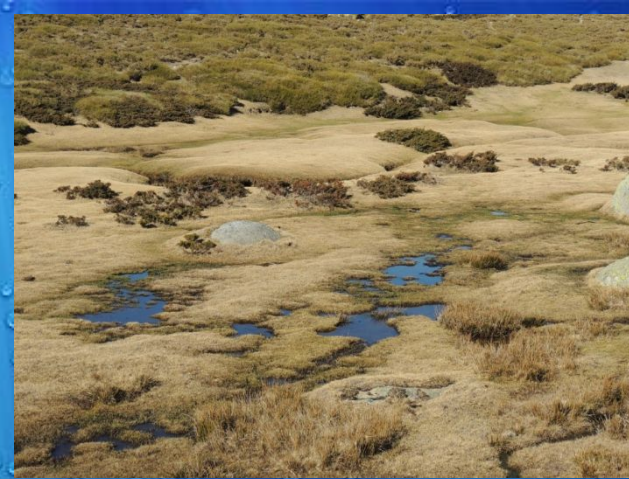
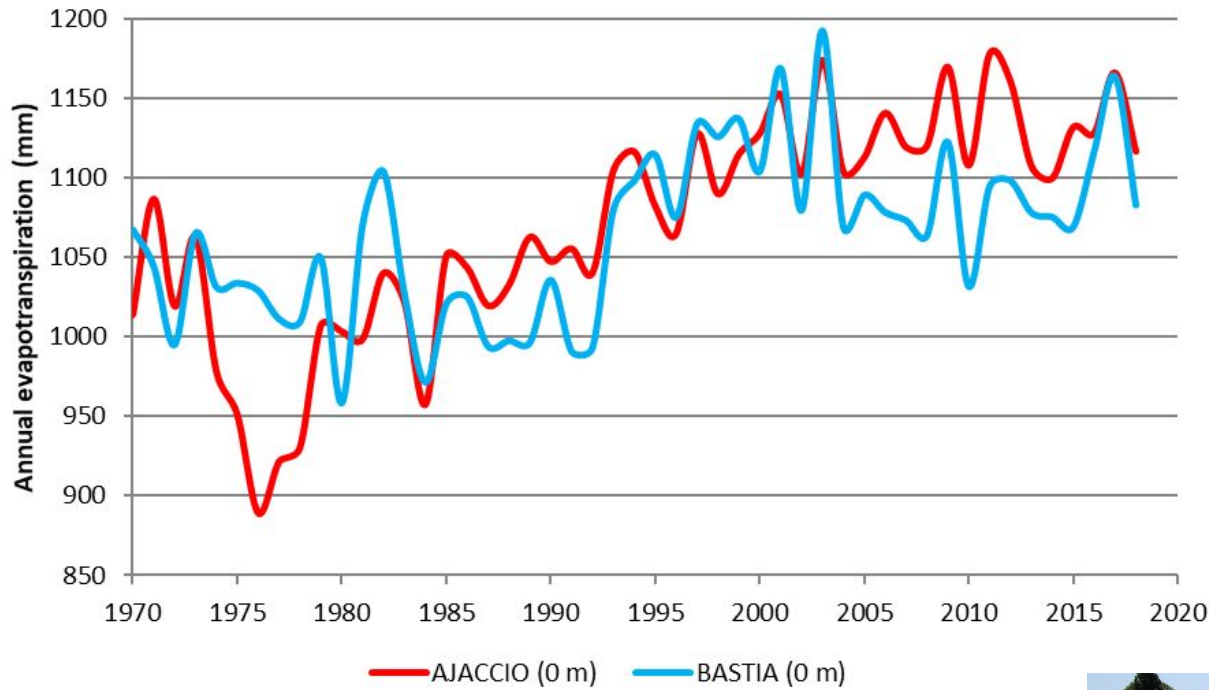
Evolution of the annual average temperature of 4 cities of Corsica



Altitude (m)	ΔT (°C)
0	1,4
500	2,3
1000	3,3

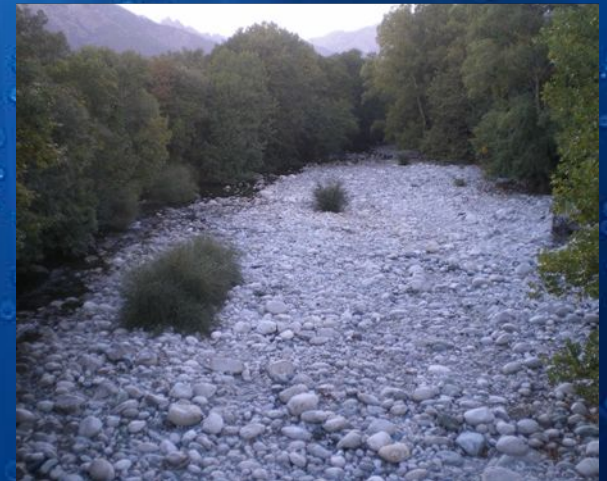
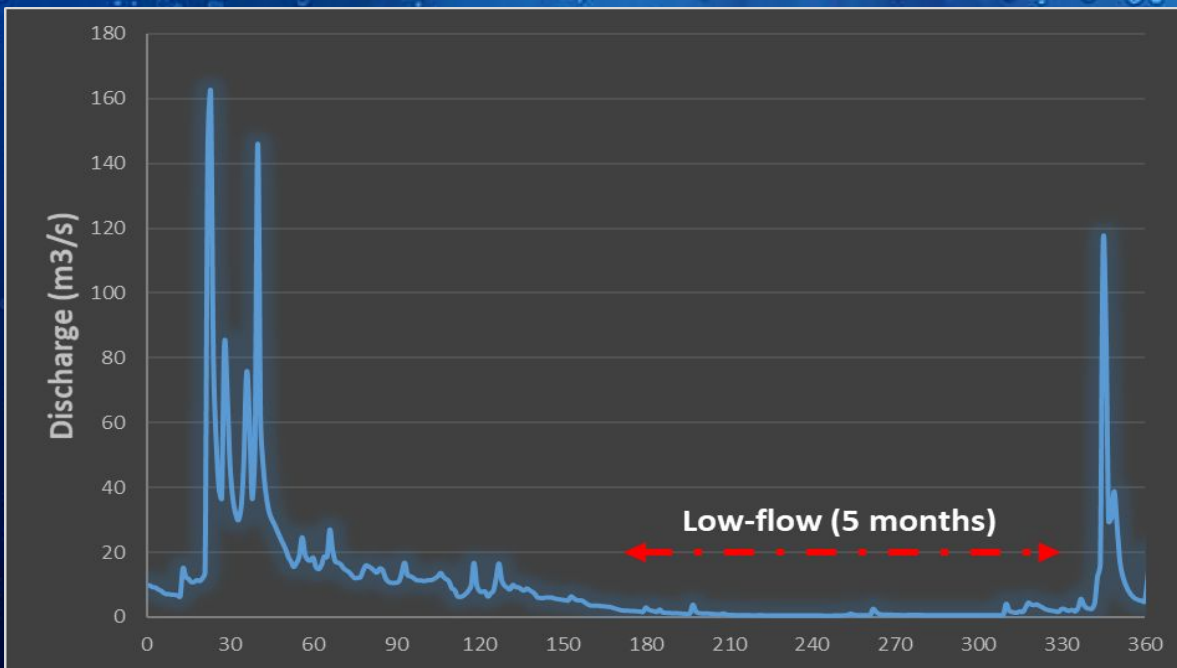
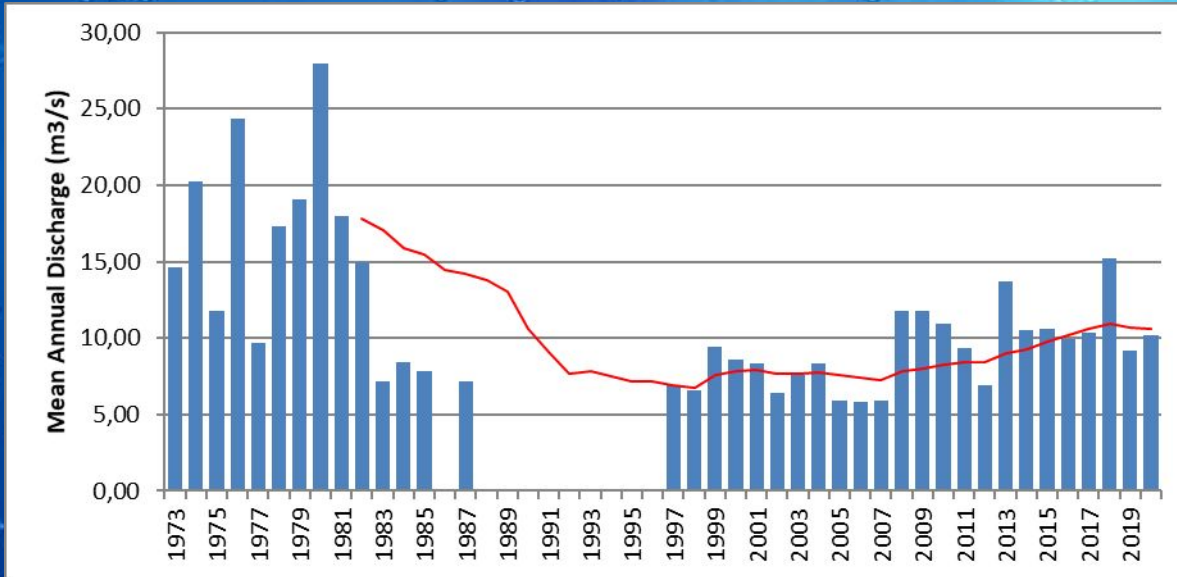
Increase in average air temperature in 40 years

Evolution of annual evapotranspiration of 2 cities coastal of Corsica



Increased of intensity and duration of soil drought

Impact on River Discharge (Tavignano)





PLAN DE BASSIN D'ADAPTATION
AU CHANGEMENT CLIMATIQUE
DANS LE DOMAINE DE L'EAU

Pianu di conca per l'adattazione
à u cambiamentu climaticu
in u settore di l'acqua

BASSIN DE CORSE / CONCA DI CORSICA

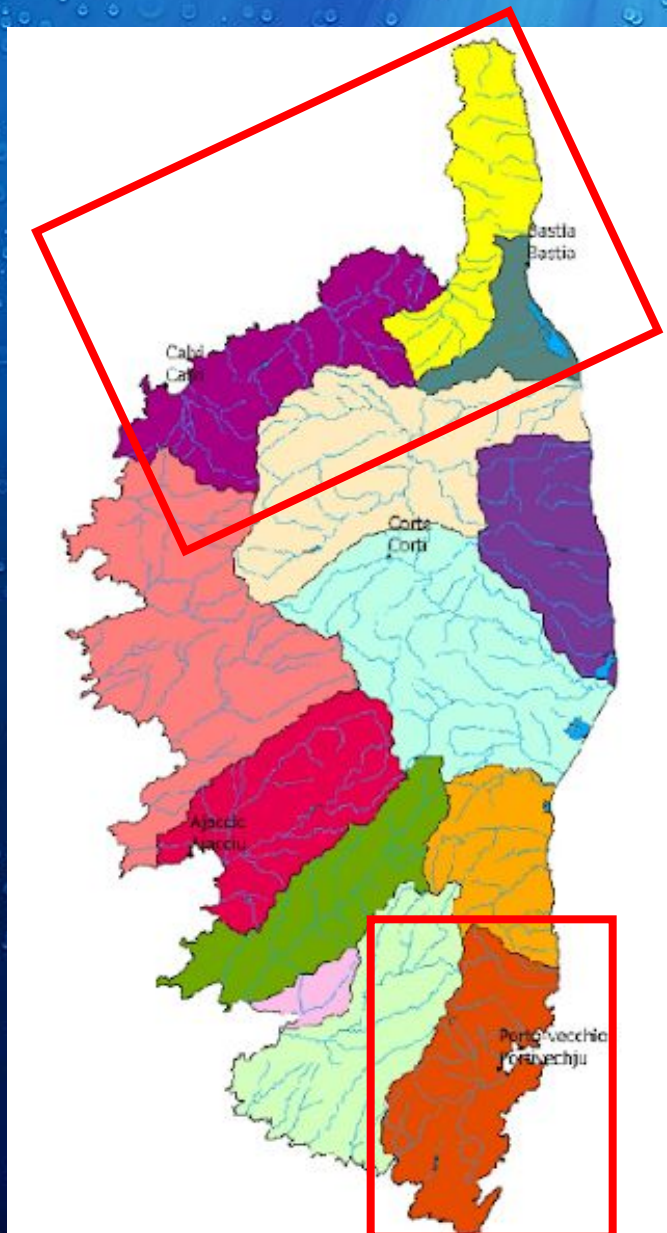
Adopté le 24 septembre 2018

Aduttatu u 24 di settembre di u 2018



The Climate Change Adaptation Basin Plan (Corsica)

The Vulnerability of Territories



PINO
Cap Corse



CALVI
Balagne



BONIFACIO
Extrême Sud

Resource scarcity:

Water Resource Systems Modeling

Groundwater Exploration

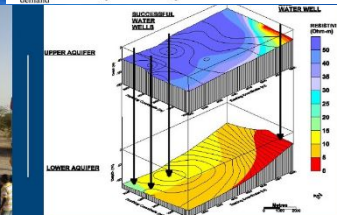
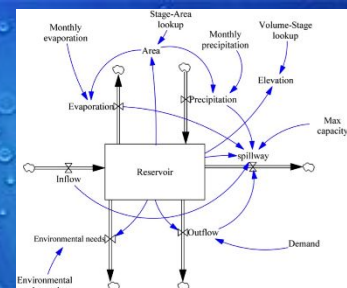
Rainwater Harvesting

Plant Species Selection

Treated Wastewater Reuse

Organization of a monitoring system.

Wireless Sensor Networks.



Biodiversity Loss:
Water Temperature

Ecological Flows

Riparian Forest

Endemic Species



Human Health Risks:

Infectious and Vector-borne Diseases

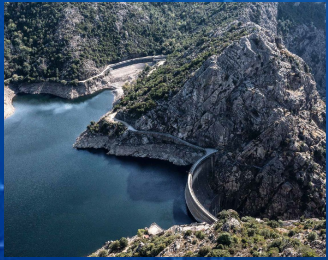
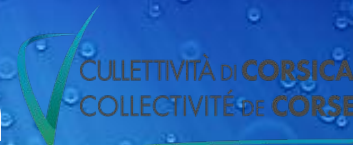
Cyanobacteria.



Male and Female Schistosomes



Know Better Do Better: Water Information and Management System Innovative Practices and Experimentation The Potential of Hydroelectric Power



Organizing for Collective Action: Local Governance



Network Knowledge, Information and Sensitization

Sharing knowledge and promoting citizen participation (NGO).

