Water management and adaptation to climate change

- J. F. Berthoumieu¹, R. Ben Aïm²
- 1) Chair of the cluster Water and Climate , Agen , France
- 2) IFTS, France

Global surface temperature anomalies 1950-2015



What happened in Agen during the last 50 years!



Cherbourd

Poitiers

Limodes

Toulouse

Rennes

Bordeau



Micro-climatic link betwen the city and the surrounding country



Surface Température – July 11,/2011





WATER AND VEGETATION PLAY A ROLE IN MITIGATING THE CONSEQUENCES OF CLIMATE CHANGE

Sealing limitation Storage of water and diffusion in the city .



How to get it?



- By applying the rules of Mediterranean Ecology
- By storing water in artificial lakes and ponds and by recharge of aquifers . (research projects)

• By using this stored water for enhancing evapotranspiration during and thus decreasing significantly the gradient of temperature .



Cluster EAU & CLIMAT

Let's have a dream



The sustainable cooling of the cities .

• Looking for solutions based on water and vegetation for decreasing the temperature in the centre of the cities in a natural and sustainable manner, providing more comfort and more healthy conditions to the citizens .



From diagnosis to actions

Presently, 2 research projects

- What kind of tertiary treatment is needed for the recharge of aquifers by the effluent of the wastewater treatment plant
- How storm water collectors could be better designed for facilitating the reuse of this water (including a preliminary treatment in the collectors)

From other part , the project of new industrial park will take into account a more effective water management and a positive contibution to heat waves mitigation .



If you want to know more about the cluster

<u>cluster@eau-climat.com</u> <u>jfberthoumieu@agralis.fr</u> <u>http://www.ifts-sls.com</u>