

WP4 Activities

URBAN WATER: EU/USA COMMON MODELS

CNRS PARTICIPATION

SWAN 5th Progress Meeting

SUMMARY

- WP4 Goal
- WP4 PROGRAM
- WP4 in relation with partners and other work packages
- Tasks in the responsibility by CNRS personnel and contractual within WP4 and within other WPs

WP4 Goals

- to **expand** one of the main thematic areas of the UMI 3157 “Water and urban development”
- to prepare the “urban water **agenda**” for the Transnational Dialogue
- to develop an **integrated urban water approach** (water supply and sanitation networks from water resources to the environment protection)
- to identify **key scientific and technological themes relevant to the field** and evaluate existing capacities within these thematic areas and identifying gaps.

Time framework

- Notice that as the Gantt chart shows (p.8/38 DOW) the greater intensity of work is concentrated in year 2 and 3. In particular, WP4 has its main activity during years 2 and 3rd

WP4 relations with other Wks

- WP4 has a total of **90 m-m** participation distributed as follows:
- **CNRS: 15 m-m**
- **UA: 8 Mm-m (Valdés Technical report)**
- UWE: 15 m-m ?
- USE: 16 m-m ?
- **BAS NIGGG: 25 m-m (Nedkov, Yaneva, Trenkova)** : starting with a shared space, Pantano Watershed (/ Rita Ranch example. *(See boundary question as presented by S.Harris)*
- **IHE 11 m-m (L.Hayde)** : in progress with participation of IHE students and seminar preparation.

Tasks

- WP4 is organized in 3 tasks and each task has its interrelations with the other workpackages and partners.

Task 4.1 Rethinking Urban Water: the need for an integrated approach

- **Sociological approach of water issues:**
 - Working paper « Rivers and dams of American Empire. A framework for a sociology of environment ». Murielle Coeurdray, Franck Poupeau
 - Working paper « The Central Arizona Project and the Stalemates of Water Management in the USA ». Murielle Coeudray, Franck Poupeau + Joan Cortinas, Brian O Neil

Task 4.1 Rethinking Urban Water: the need for an integrated approach

- A team composed by Wk1 (JValdes) and Wk4 (G.Schneier-M.) and associates from UA (T.Maddock III³ Stuart Marsh, Kyle Hartfield) and stakeholders Ed Curley, and Eric Wieduwilt and former UMI students (D.Clavreul, D.Duczinski) are currently working on a **Technical Report on « Challenges of Urban Growth, Water and Wastewater: the Southern Arizona Story”**
- They have picked interesting illustrations within the basin case to obtain data and to compare it.

- Department of Hydrology and Water Resources, The University of Arizona, USA
- Centre de Recherche et Documentation sur les Amériques, CNRS/ Université Paris 3 Sorbonne-Nouvelle
- School of Natural Resources and the Environment, The University of Arizona, USA
- Arid Land Studies, The University of Arizona, USA
- Regional Wastewater Reclamation Department, Pima County, Arizona USA
- Planning and Engineering, Pima County Regional Wastewater Reclamation Department, Pima County, Arizona USA
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Task 4.1 Rethinking Urban Water: the need for an integrated approach

- **CNRS/IHE** collaboration in progress with participation of IHE students and a joint seminar preparation (location to decide).

Task 4.1

- Elaboration of a transdisciplinary framework: the Observatory Man-Environment (OHMI, kick off meeting Novembre 17th 2014): in collaboration with the Contaminant Transport Group (UoA: Marc Brusseau, Jon Mainhagu, Kayla Vigogne)

Researchers involved: Franck Poupeau, Murielle Coeurdray

Task 4.2 Development of a geo-spatial database and visualization tools

- Deliverable 4.S (supplement) on “Water and Urban Growth: a remote sensing approach in TMR” has been submitted (*See website*)
- Current work by BAS NIGGG on *Supply&demand of ecosystem services in Pantano Wash* contributes to this task.

Task 4-3: Urban Water Stakeholders participation: (Months 12-36)

- The TR includes two stakeholders – E. Curley, E. Wieduwilt from Pima County RWRD - . meetings are regularly hold with all the associates. This also involves exchanging of information and drafting future Seminar involving IHE students who are in a majority professionals engaged in their home country.

WP4 tasks 4.1 - 4.3

- Participation in the coordination of Wednesday meetings, Tucson Basin Case Study. (A.Serrat C.)
- Developing ideas for assessment of the Tucson Basin vulnerability to changes in water supply (CAP changes + climate change).

Wk4 in Wk1

- Unpacking Adaptive Capacity for Water Security primer.
- Networking activities with WB, OECD, AGWA, ICIWaRM.

UA – UNESCO-IHE collaborations

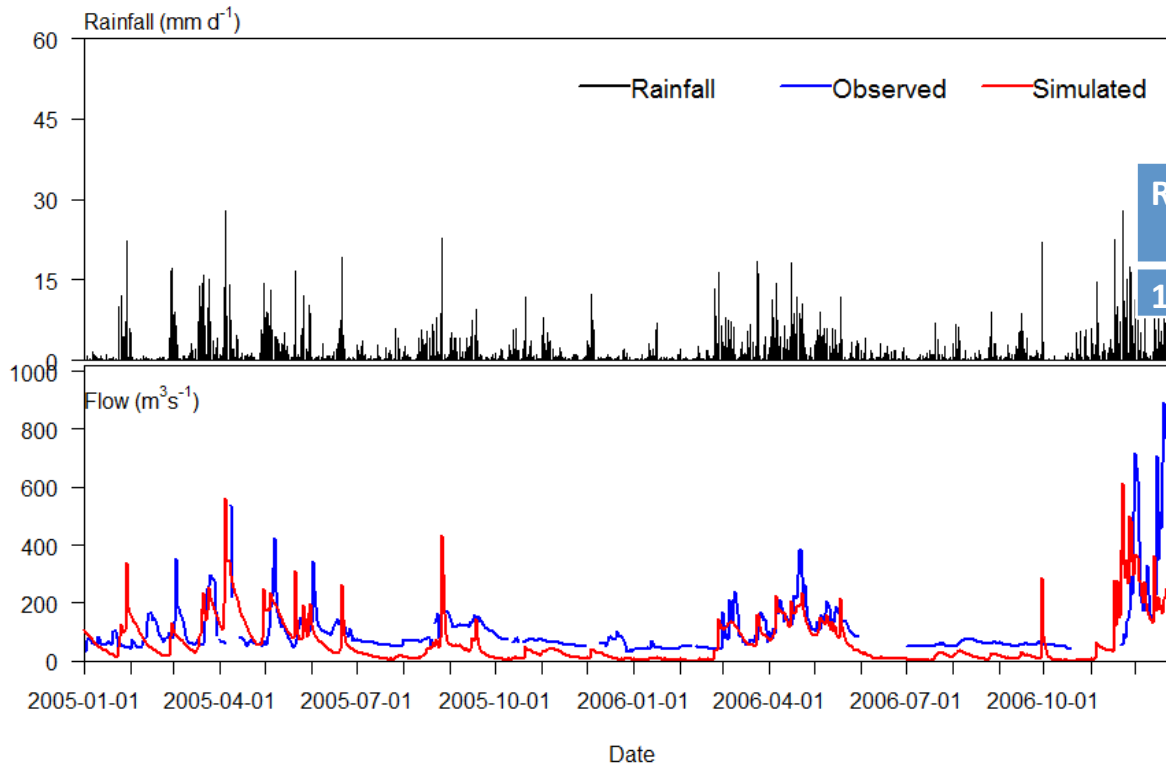
SERVIR 

- Water Management & Stakeholder involvement - Kenya



SWAT model forced by bias corrected CMORPH mimicked fairly the seasonality the observed flow of the Nyangores in Bomet

Basin water balance components



Rainfall	PET	Water Yield	ET	REVA P
1050	1544	205	805	31

Tadesse Alemayehu, Ann van Griensven
UNESCO-IHE Delft

