



A Transatlantic Dialogue on Water

Next Steps for the Feasibility Study

Progress Meeting, April 20-25, 2015



Interdisciplinary and Global
Environmental Studies

Franck Poupeau
CNRS

Contents

- **Introduction:** A Transatlantic Dialog on Water
- **Lessons from the Tucson Case Study**
- **Feasibility study:** scientific and organizational questions
- **Action Plan?**

A Transatlantic Dialog on Water

- Strengthen transdisciplinary science and public participation on water issues within an international framework
- Find a niche for the Transatlantic Dialogue Water (TDW) inside the University of Arizona:
 - *Meet scientific priorities of UoA and fill research gaps*
 - *Determine what the Transatlantic Dialogue can provide, that other well established organizations are not providing*
 - *Find a place for an “European UMI” (INCOLAB Project: SWAN)*

November 2014: Time to start to wrap up things and to be pragmatics:

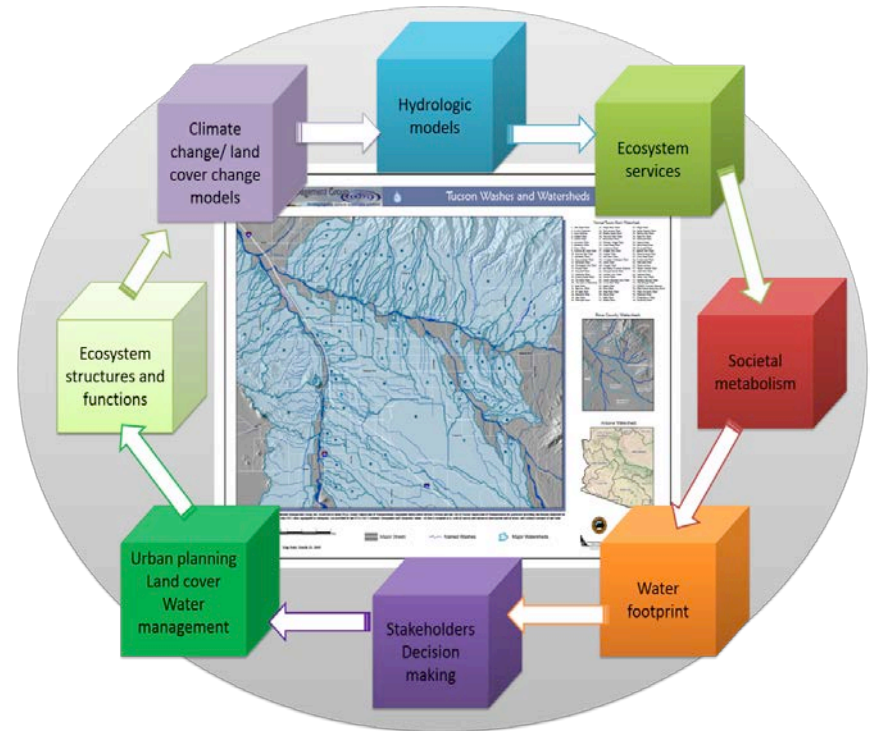
- to organize the research fields of the SWAN project
- to define how to build a specific academic offer at/for the UoA.

Open perspectives

- The ongoing collaboration between SWAN teams has been focused more and more on the **case study** related to Water Management & Environmental Policies in the Tucson area (+ Book Proposal)
- As a by-product of such collaboration, several **reports** have been produced on different topics and scientific papers are under preparation (Climate Change, Water Security, Data & Water management, Urban Water, etc.)
- 1st SWAN International Conference on Data and Governance, hosted in Seville in June, 2014 -> Open Knowledge: one of the goals for SWAN2
- **HOW TO GIVE COHERENCE TO ALL THESE ELEMENTS?**

Tucson Case Study: A Model of Transatlantic Dialogue

- Visits of the team students and the support of the UMI-CNRS and HWR-UoA= A place to realize activities (UMI/HWR)
- Idea of **education/training** to transdisciplinary & participatory research
- How to institutionalize this kind of international collaborations?
=>Feasibility Study



Feasibility Study:

how to bridge scientific and institutional issues

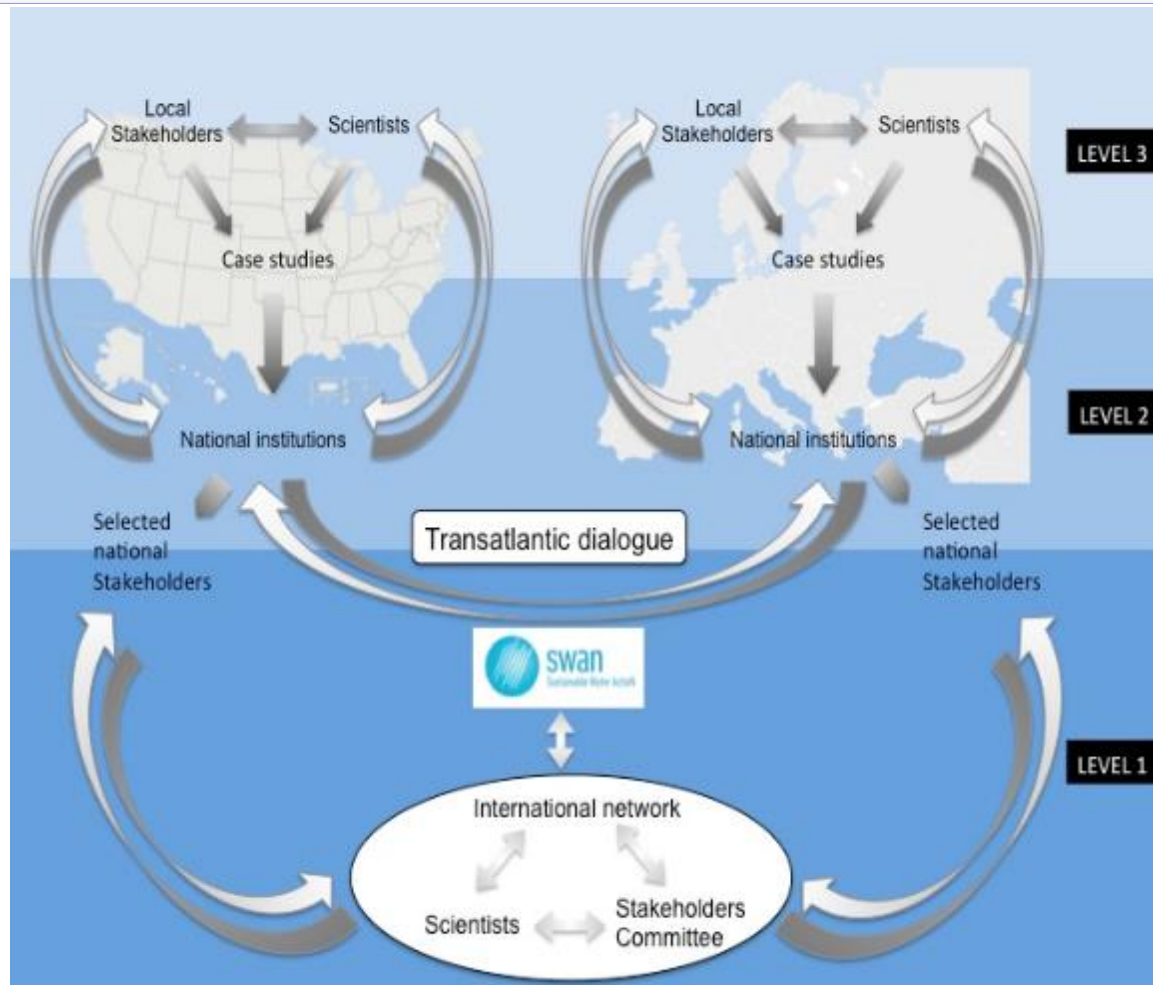
To proceed, the FS has to identify:

- 1) Key research priorities
- 2) Cross-cutting scientific themes between the teams
- 3) Advantages & strengths of having an European organization in the UofA/USA to support this project

Two main questions (in terms of sociology of sciences):

- Is there a **specificity of water issues** in terms of organization of scientific work?
- How to produce a **participatory research** with stakeholders engagement?

A Multi-level Field for a Transatlantic Dialogue



Stakeholders' recommendations

RECOMMENDATIONS BY RESPONDENTS (2014+2015)

- Define the scientific perspective - a research niche.
- No need for new organizations (open process: from scientific network to more institutional structure)
- But real demand for more communication/connections/exchanges with academia
- The proposed TDW:
 - should be scientific and have a close cooperation with the private sector and governmental institutions (reports, books, co-organization of training activities) + communities & NGOs.
 - should lead to broadening and deepening the development of simulation models of best practices for water management.
 - should contribute in the improvement of water management politics by facilitating exchange of knowledge (ex: implementation of WED)

Debated Questions

➤ Several different questions:

- Is this the role of science to support (or contest) decision making in the area of water management? Or is it to produce knowledge? Or science-based policy?
- Stakeholders demands for technical solutions & for scientific resources: do we have to choose?
- Context of a market of academic expertise in Western USA
=> what **politics of knowledge** do we want to defend/support?
- Can a participative research be limited to a scientific network or an academic structure? Are there institutional alternatives? Are these alternatives compatibles with scientific goals?
- Was applied research the main interest of SWAN as a space of discussions and interdisciplinary exchanges?

Sociological comments

on the scientific and political implications of stakeholders engagement

- An institutional/legal structure might be appropriate to achieve stakeholders engagement. Cf. Sheridan et al. (2014) *Stitching the West Back Together. Conservation of Working Landscapes*:
 - Based on the results of a research with the distribution of an analytical tool called “Grassroots Collaborative Conservation Survey” distributed to community-based environmentalist groups.
 - Example of Altar Valley Conservation Alliance in Arizona, created in 1995 and became a [501\(c\)3 non-profit organization](#) in 2000; work with the UoA and other local foundations => management agreements with ranchers; dialogue and trust between agencies, scientists, farmers, conservationists etc.
- To promote collaboration with stakeholders in a research project implies also to take into account the social conditions of access to political participation (social & environmental inequalities)

Risk assessment analysis

- First step -- based on a contractual basis, taking into account the different levels of stakeholders: international advisory board, national members that regularly collaborate and local stakeholders involved around a project?
- Second Step (SWAN2) -- What kind of legal structure for the TDW? Company, Association, Foundation or a legal structuration without legal personality (academic center or network, MOU)? => **European structures not adapted to USA scientific structures**
- The principal risk concerning a structure with legal personality is the tax question. Fiscal laws are different for each country and might be an obstacle to the participation of several members in different countries. Another financial risk is the management of contributions. Is there a more flexible way of managing funds?

An Institute for Open Knowledge on Water?

How to preserve the [Institutional Legacy](#) of SWAN 1?

A question of opportunities:

- 5th Progress Meeting (Nov.2014): an opportunity inside the UoA (Report by S.Ramboti, cf. D.5.4 + Interdisciplinarity)
- Citizen Science Conference: (Feb.2015): an opportunity outside the UoA (V.Cabello's presentation in the Central Seminar)
- Context of transformative knowledge (funds, topics, etc.)

Training for transdisciplinarity:

- Transformative knowledge: not only contents but also reflexivity (to know how/what to know):
 - Managing big data
 - Managing important corpus of specialized literatures
 - Managing non academic sources of knowledge: stakeholders, participation, citizen science, etc.
- Strong scientific basis (PhD level Students)
- Academic validation and recognition of the interdisciplinary/international work
- Research fieldwork (case study model)
- A place (and time) to talk, exchange, etc.

The Final strategic report will propose:

- ① Vision, scope and structure of the future organization: a strategy to expand the UMI 3157 (CNRS / UA) into a multi-partner scientific European platform in the USA :
 - Short list of potential **new partners**, and criteria to enhance the process of scientific and institutional integration.
 - A **secretariat**, based at UMI/UoA, in order to provide organizational support.
- ② A mechanism for students and staff **mobility between SWAN partners**, particularly with arrangements for student exchange and study.
- ③ A multi-institutional & collaborative **training program**.
 - A clear division of tasks between partners to manage such a program: students & researchers mobility, scientific curriculum & research training, organization of case studies, workshops, etc.
 - A clear evaluation of economic and human resources to lead such a project inside the UoA: a project manager, but also a research coordinator different from the official coordinator (post-doctorates, researchers, etc.) => Socio-economic Report still to be made by CNRS
 - Who would be concerned? Scholars? Students? Water managers?

Towards SWAN 2?

➤ Concrete solutions:

- 1/ Submit an International PhD training proposal, such as the ITN/ European Doctoral Program (H2020), based on a bi-lateral collaboration:
 - UMI as an interface between US and EU institutions and funds
 - each European or American partner is already engaged in a lot of training activities: the UMI-CNRS would be the most evident coordinator but with the risk of becoming only a exchange hub (with not enough human resources to maintain real scientific activities)
- 2/ Research Networks Programs in the USA
- 3/

➤ **Added value** of such an Institute for Open knowledge in the USA & in the field of water issues ??