A comparative analysis of public participation in water management between Tucson basin (AZ) and Ebro basin (SP)

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Public participation

**Definition:** Practices through the citizens seek to influence public issues... ...both institutional and non-institutional... ...and in different degrees of influence...

<table>
<thead>
<tr>
<th>Sub-degree</th>
<th>Relationship</th>
<th>Description</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information</td>
<td>One-way</td>
<td>Government produces and delivers information for use by the public</td>
<td>Passive (upon demand) and Active (measures to disseminate)</td>
</tr>
<tr>
<td>Consultation</td>
<td>Two-way</td>
<td>Government define the issues for consultation, set the questions, manage the process. Public contribute with their views and opinions</td>
<td>Public opinion surveys, draft comments, workshops,...</td>
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<tr>
<td>Active involvement</td>
<td>Partnership with government</td>
<td>Public actively engaged in defining the process and content of policy-making, setting the agenda, proposing policy options, although the responsibility for the final decision rests with government</td>
<td>Consensus conferences, citizens' juries,...</td>
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Tucson basin

Location: Arizona, US
Area: 1700 mi²
Annual average flow: Temporary river
Groundwater status: Figure 1 (ADWR 2010)
Main social conflict: Water quality
Water Authority: Arizona Department of Water Resource
Condition: Recipient basin
History: The river has been dried (effort to recover it)
Ebro basin

Location: Spain, EU
Area: 52337 mi²
Population: 2.767.103 hab.
Annual average flow: 14.623 Hm³
Ecological status (surface and groundwater): Figure 2 (CHE, 2014)
Main social conflict: Water quantity-water transfers
Water Authority: Confederation of the Ebro basin (State competences)
Condition: Transferor basin
History: Better water quality (although it is improving)
General questions

• Why does social involvement differ in the two basins despite significant interest in water issues? What influences public involvement?
• What are the results of public participation?
Questions, actions and methods

• How does the institutional framework in each basin influence public participation?
  — Description of the institutional framework: Literature review, legal review.

• To what extent is water policy a public debate? What kind of social interest is there on water issues? What is the role of environmental organizations in water policy-making? What are the main conflicts on water issues?
  — Description of socio-political context on water management: Map of actors (name, field, activities, of environmental organizations, networks, social movements...); literature review; press review (2 in each case, most widely-read newspapers); election campaign review.
Questions, actions and methods

• Does public participation in water management influence decisions? Does it contribute to adaptive management?
  — Operationalization of adaptive management
  — Description of public participation processes on water management: Literature review (name, scale, goal, participants, degree of participation, time frame, general results)
  — Analysis of participation on water planning process: Interviews (10 in each case), comparison between the documents resulting from the participatory process and the approved plans.
Institutional framework

**Institution:** An organism that plays a role in the public interest

**Geography**
- **Arizona**
  - Department of Water Resources
  - Department of Environmental Quality

**Tucson basin**
- Groundwater users advisory council
- Public agencies (6)

**Spain**
- Spanish Constitution (1979)
- Water Act (2001)
- Access to information, public participation and access to justice Act (2007)
- Ministry of Agriculture, food and environment—General Directorate of Water, General Directorate of Environmental Quality

**Ebro basin**
- Basin Authority
- Water council
- Users Assembly
- Reservoir Commissions
- Exploitation Assembly
- Competent Authority Committee
- Local Councils
- Public agencies (14: + 20,000 hab.)

**United States**
- Clean Water Act (1972)
- Administrative procedures Act (1946)
- Environmental Protection Agency

**Arizona**
- Department of Water Resources
- Department of Environmental Quality

**Tucson basin**
- Groundwater users advisory council
- Public agencies (6)

**European Union**
- Water framework directive (2000)
- European Environment Agency

**Spain**
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## Participation processes

### TUCSON

1. Tucson AMA 2\textsuperscript{nd} management plan  
2. Tucson AMA 3\textsuperscript{rd} management plan  
3. Pima County Water and Wastewater infrastructure, supply and planning study  
4. Regional water assessment  
5. Santa Cruz water authority  
6. Tucson water plan 2000-2050  
7. Assured water supply rule development  
8. Issues with CAP delivery

### EBRO

1. Ebro river management plan: Basin and sub-basins (Catalonia, Navarra, Vasque country)  
2. Sustainable Commission of the Ebro delta  
3. Matarranya river contract  
4. Cidacos river contract  
5. Issues with Ebro transfer  
6. Issues with dam-building (Biscarrues, Yesa, Itoiz, Korrosparri etc.)
## Sample of participatory processes in water management

<table>
<thead>
<tr>
<th>Process Name</th>
<th>Goals</th>
<th>Participants</th>
<th>Time Frame</th>
<th>Results of process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tucson AMA 3rd Management Plan</td>
<td>Safe-Yield by 2025</td>
<td>GUAC, 8 advisory committees with 88 different individuals and general public</td>
<td>1998-1999</td>
<td>Management Plan including significant regulations for water uses</td>
</tr>
<tr>
<td>Hydrological plan of the Ebro basin</td>
<td>Good ecological status, ensuring water supply</td>
<td>Water council, Committee of Competent Authorities, 27 sub-basins, 2131 people</td>
<td>2006-2008</td>
<td>Management Plan</td>
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