

Exploring the hydrosocial cycle in tourist areas

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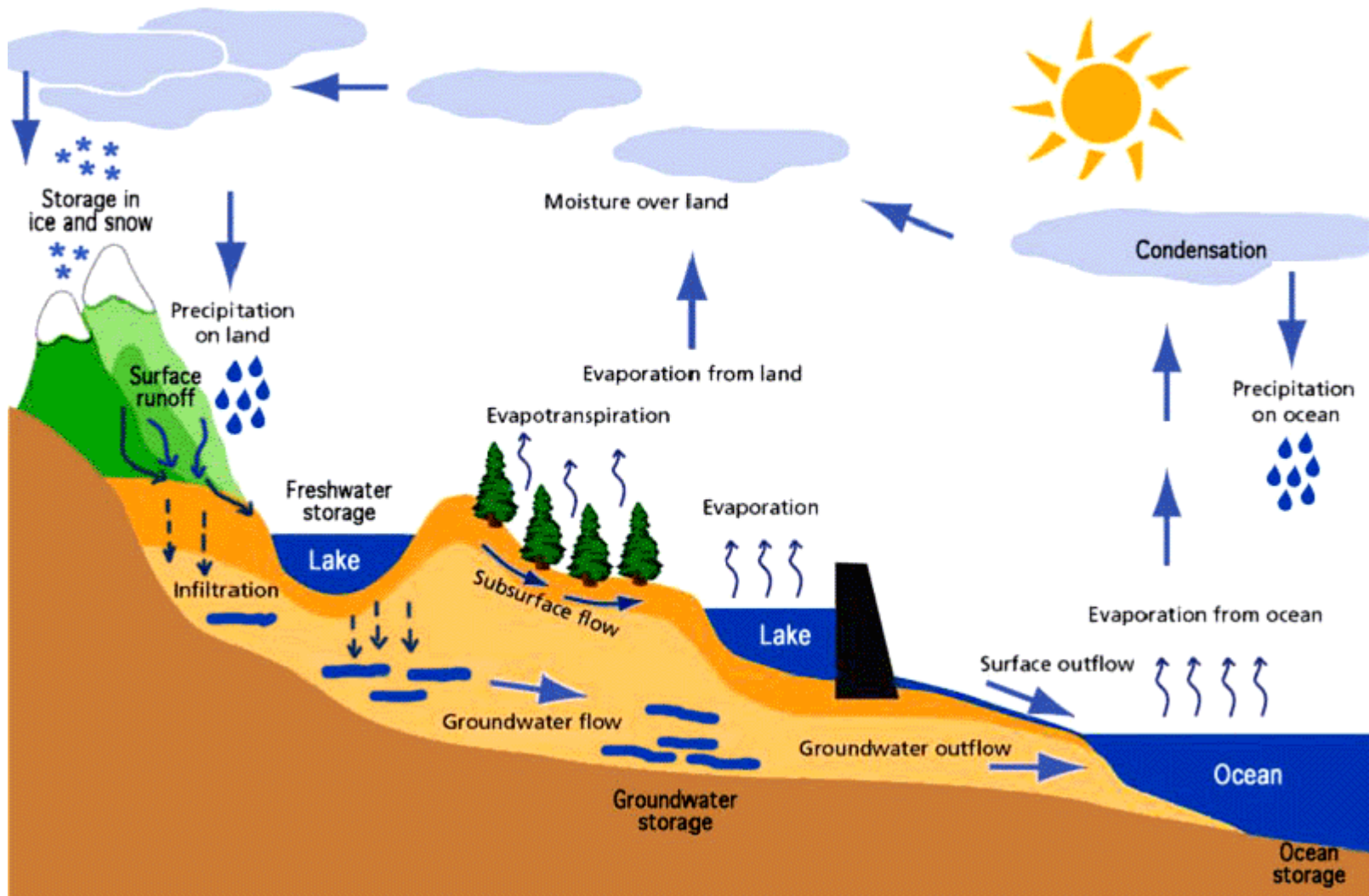
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Outline

- The water cycle: from the “natural” to the “social”
- The hydrosocial cycle concept
- The hydrosocial cycle in tourism: opportunities and challenges
- Conclusion

The hydrological cycle



Human appropriation of the hydrological cycle

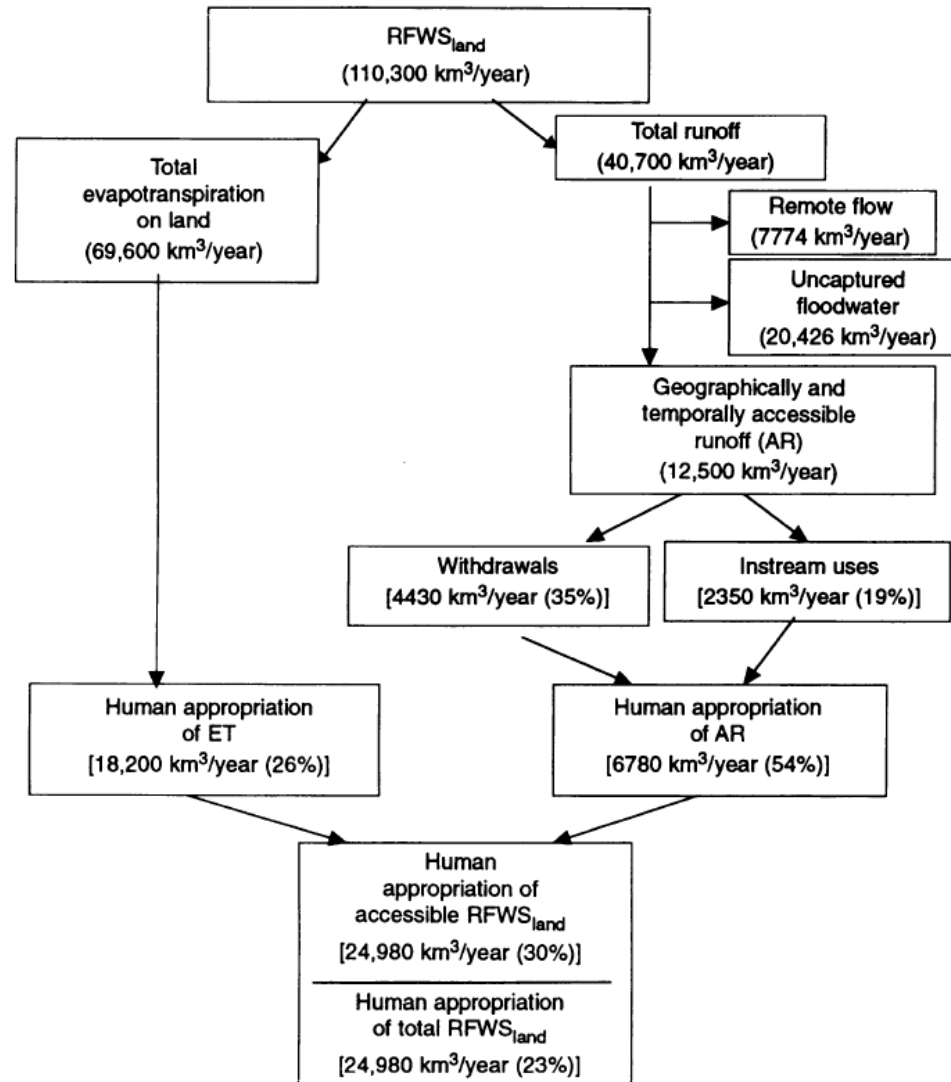
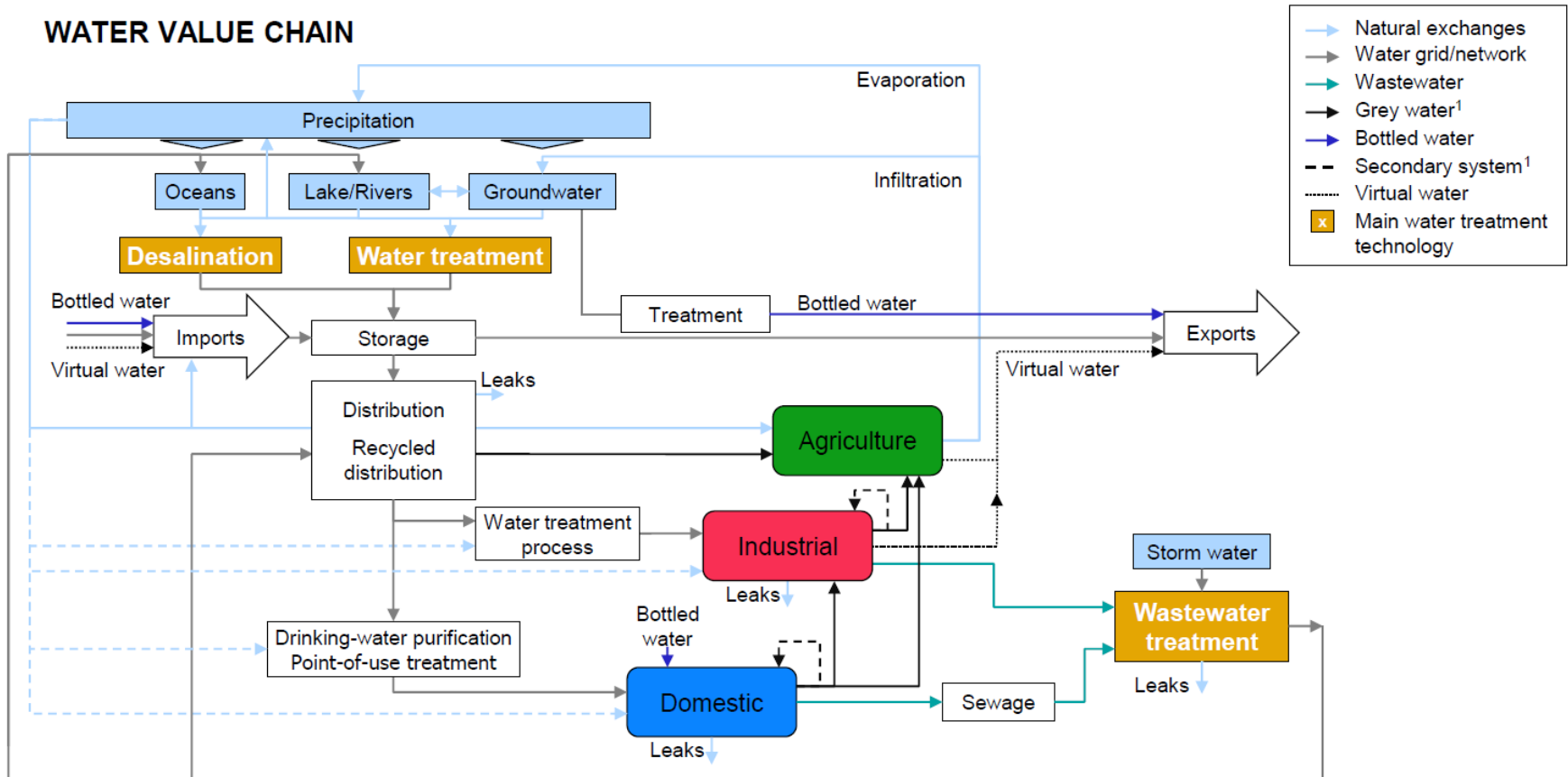


Fig. 2. Flow diagram of analysis of human appropriation of $RFWS_{land}$. The final box shows human appropriation of estimated accessible $RFWS_{land}$ to be 30% ($24,980 \text{ km}^3/82,100 \text{ km}^3$) and human appropriation of total $RFWS_{land}$ to be 23% ($24,980 \text{ km}^3/110,300 \text{ km}^3$).

Water flows and compartments: the human intervention

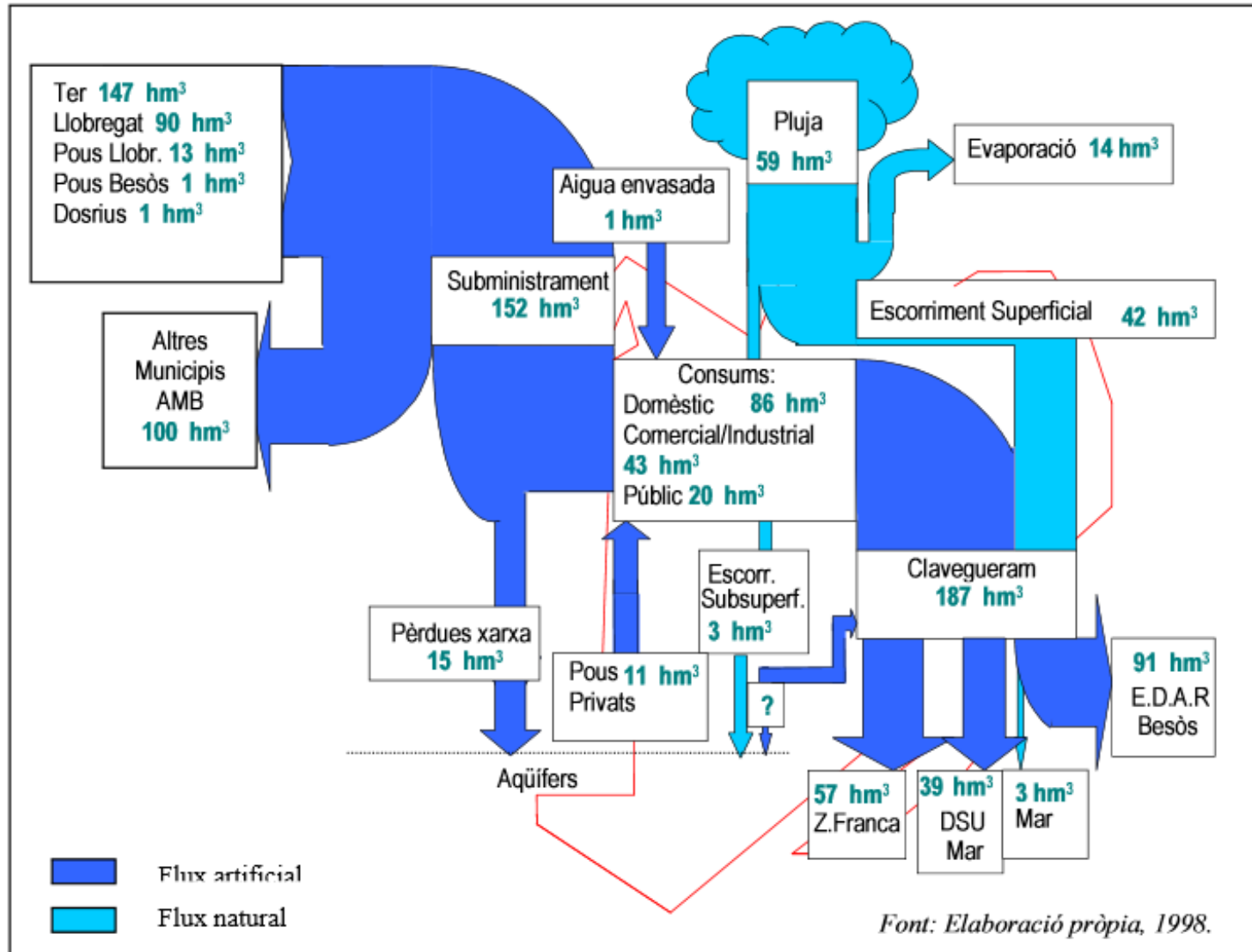


Note: Water-demand management is not represented here, but is becoming an increasingly important element in the water value chain; ¹ Greywater: wastewater generated from domestic or industrial processes, reused internally in a secondary system (large dotted line) or externally by another process (e.g. irrigation).

Source: SAM (2010), "Water: a market of the future"; UNEP (2012); "Measuring water use in a green economy"

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Figura 1: El flux de l'aigua a Barcelona, 1995.

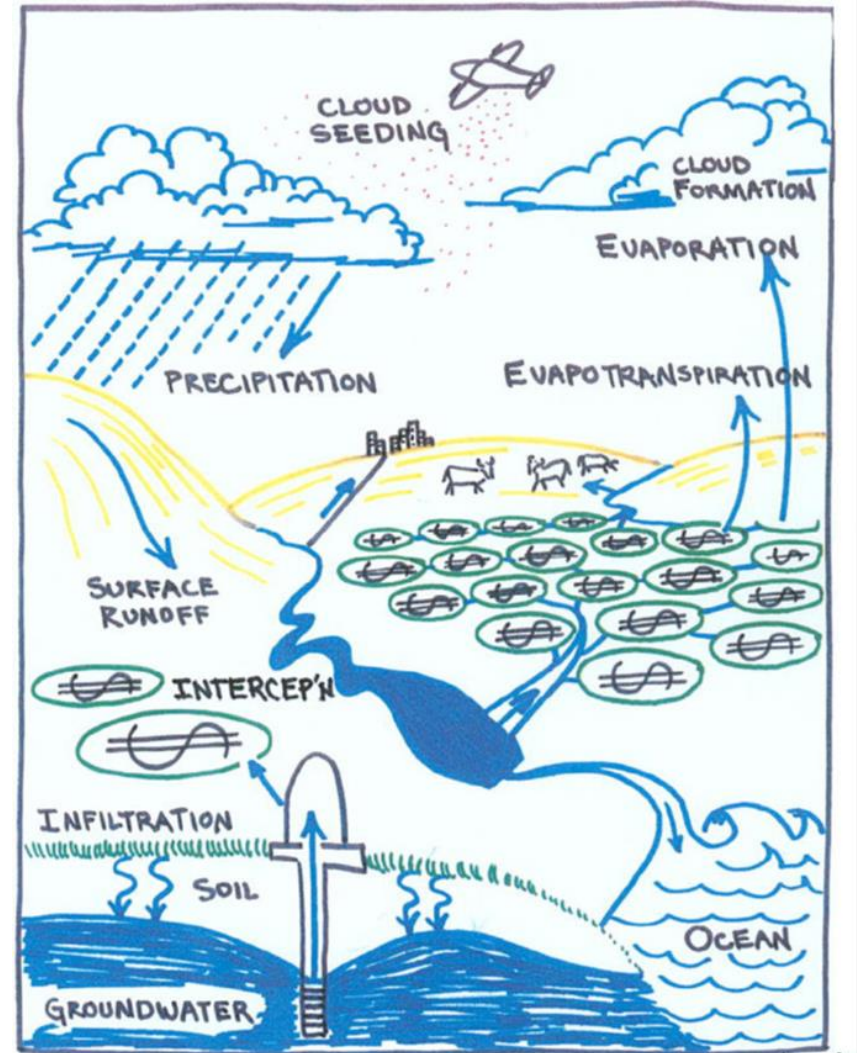


The HSC: Main features

Dialectical relation between water and society or interventions in the hydrologic cycle brings changes in society and vice-versa:

Intervention in the hydrologic cycle: product of social structures and geometries of power.

At the same time, water produces political and social effects as well

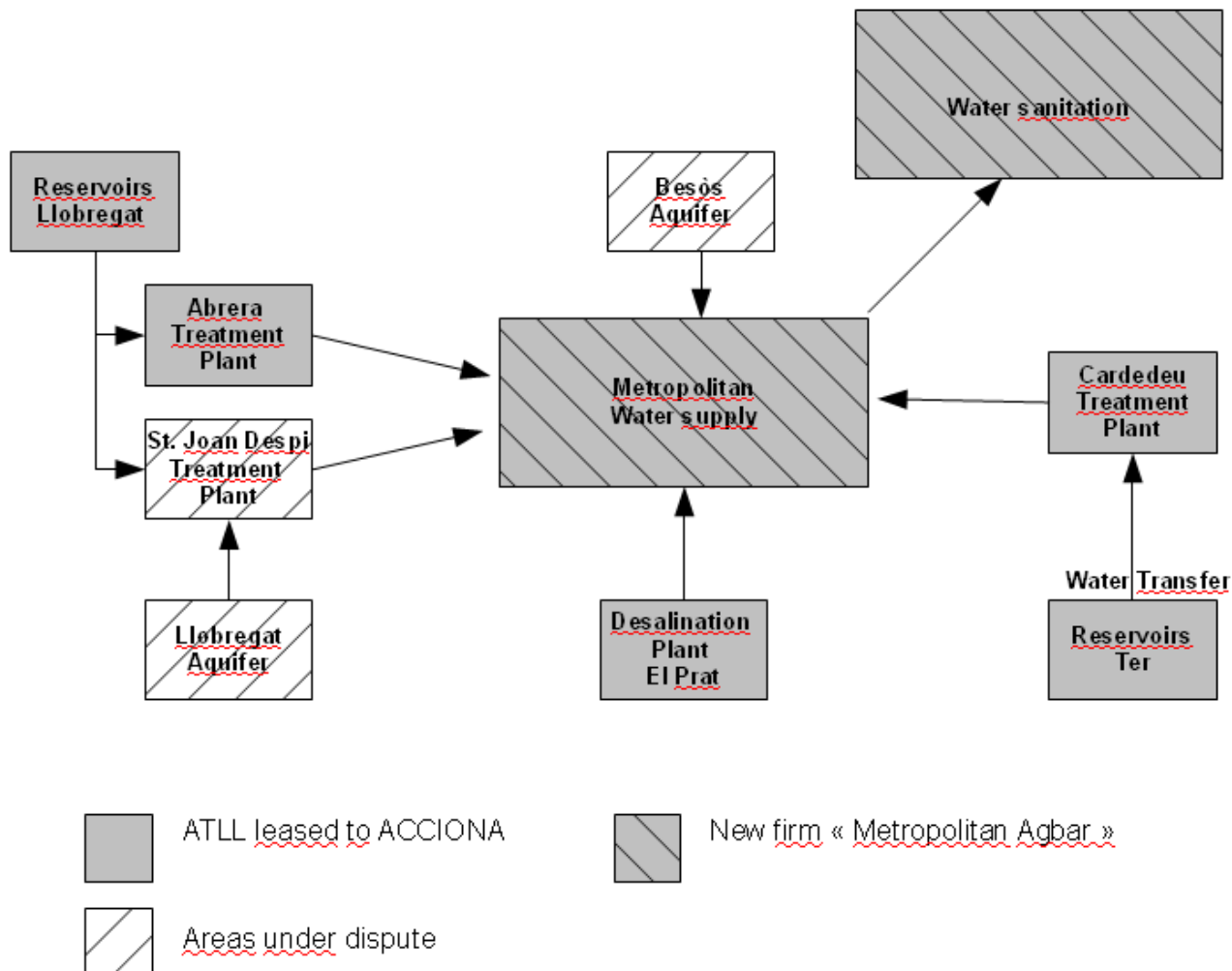


*The hydrologic cycle as it occurs today.
Water flows to money!*

Ely, in Linton and Budds, 2013

THE RECONFIGURATION OF THE “HYDROSOCIAL” CYCLE IN BARCELONA AFTER 2012

Water supply and sanitation, currently



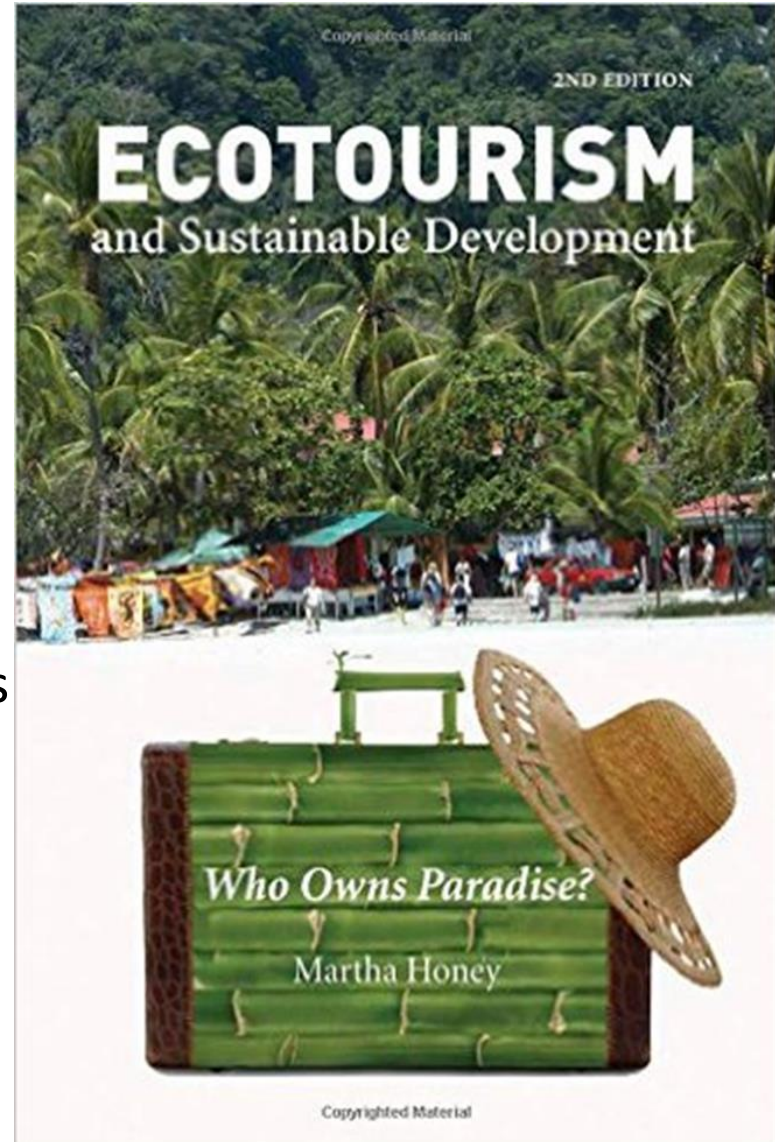
Tourism and the environment: critical perspectives

Focus on the developing world

Tourism linked to broader processes of globalization

Tourism impacts usually conceptualized in terms of Inequality (i.e, in access to resources or vulnerability to hazards)

Contradictions of certain tourist forms: eg: “ecological tourism”



Water and tourism: changing hydrosocial cycles

- Disparities of access between locals and tourists in terms of quantity and quality
- Development of water resources geared towards tourism to the detriment of other economic options (irrigated agriculture)
- Increasing presence of “alien” flows (bottled water, virtual water) with their own impacts and costs (eg waste disposal facilities, etc)

However,....

- Tendency to treat tourism as an undifferentiated activity and, therefore, failure to recognize the multiple forms and typologies of tourism which are continuously changing and expanding. For example, water consumption in villas with gardens and swimming pools may be four or five times higher than in campsites (Rico et al 2009)
- Little attentive to more subtle forms of inequities: for example: expansion of desalination to cover for increasing scarcities in areas of competition between agriculture and urban/tourist uses unravels the inability to pay for these new flows by farmers and also by the less well off in urban areas.
- Also, more attention needed to the water-energy nexus in tourist areas and its relation to power structures: who controls water and who controls energy?

Conclusion

- The Hydrosocial concept useful to examine the physical, economic and social dimensions of water metabolism in cities including large tourist resorts
- Critical approaches (eg political ecology) need to be more attentive to the multiple forms of tourism each one with specific characteristics and patterns of consumption of water resources
- Focus on the developing world needs to be accompanied with more studies in the developed world where more subtle and nuanced inequities in access to water may be present.

THANKS FOR YOUR ATTENTION!!!

