



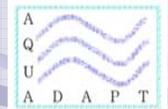
# Socio-cultural influences on water utilisation: a comparative analysis

## Aquadapt Project – WP2

Antonio Aledo Tur  
Guadalupe Ortiz Noguera



Universitat d'Alacant  
Universidad de Alicante



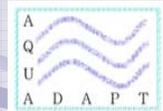
# General Objective

- The general aim of the WP2 has been to determine the socio-cultural influences on water utilisation. These influences are understood as a set of dynamic meanings that generates attitudes and behaviours that allow us to design new formulas for the sustainable use of water with a higher level of confidence.

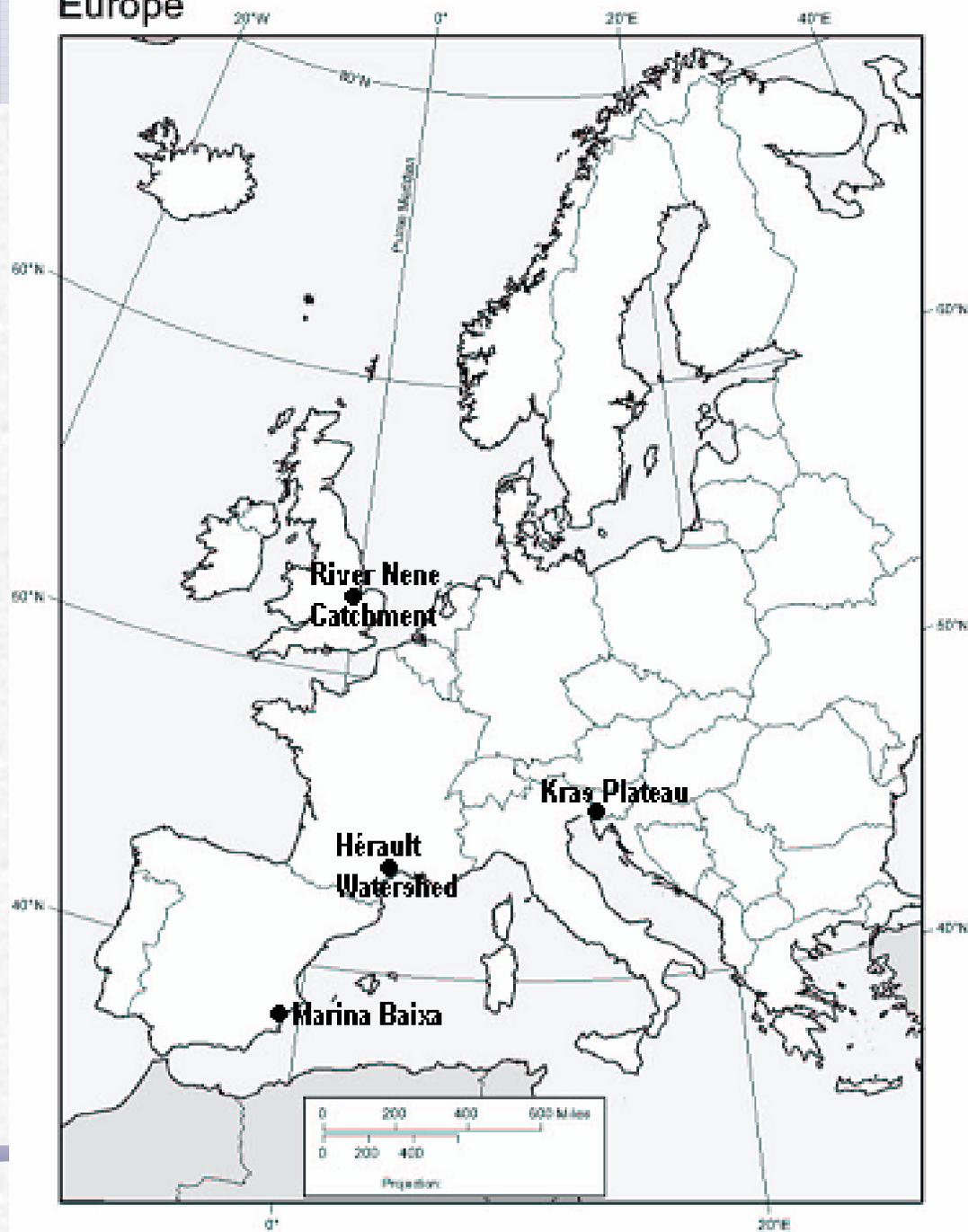


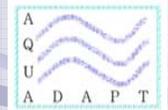
# Objectives

- This presentation shows the main results and conclusions obtained from the development of the objectives of the Workpackage 2 of the Aquadapt project. A survey was carried out in four different catchments: the Hérault watershed, France; the Kras plateau, Slovenia; the Marina Baixa region, Spain; and the Nene catchment, UK.



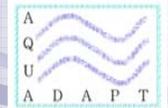
# Europe





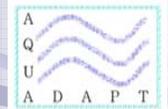
# Objectives

- To investigate the attitudes of consumers towards water as a communal resource, as a social right and as a commodity,
- To understand the linkages and the differences between four case studies to determine the scope of local, regional and international integrated water management challenges.



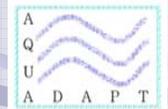
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2. Analytical procedures
  - 2.1 Comparative analysis of national basic frequencies.
  - 2.2 Consumer profile analysis
3. The existence of a shared set of values, attitudes and behaviours.
4. Conclusions.



# 1. Socio-environmental features of the catchments

- The Marina Baixa represents an extreme case characterized by its semi-arid climate, where water is a scarce and valuable resource.
- The central issue in the Slovenian case study is the difficulty of extracting water from the karst aquifers.
- In all four regions agriculture is an important sector of the local economy. Industry is also a significant activity in the UK, French and Slovenian cases.
- The service sector in all four countries is growing rapidly, mainly due to the expansion of the tourism industry which can trigger water use conflicts among water consuming sectors.



## 2. Analytical procedures

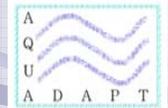
2.1) Comparison of basic frequencies;

2.2) A consumer profile analysis to understand the attitudes and behaviours towards the use and consumption of water of the respondents, constructing three different typologies:

a) based on the level of concern about water issues;

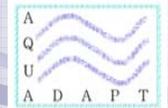
b) based on how informed respondents feel they are with respect to water issues;

c) based on water saving behaviours.

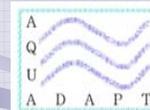


## 2.1 Comparison of basic frequencies

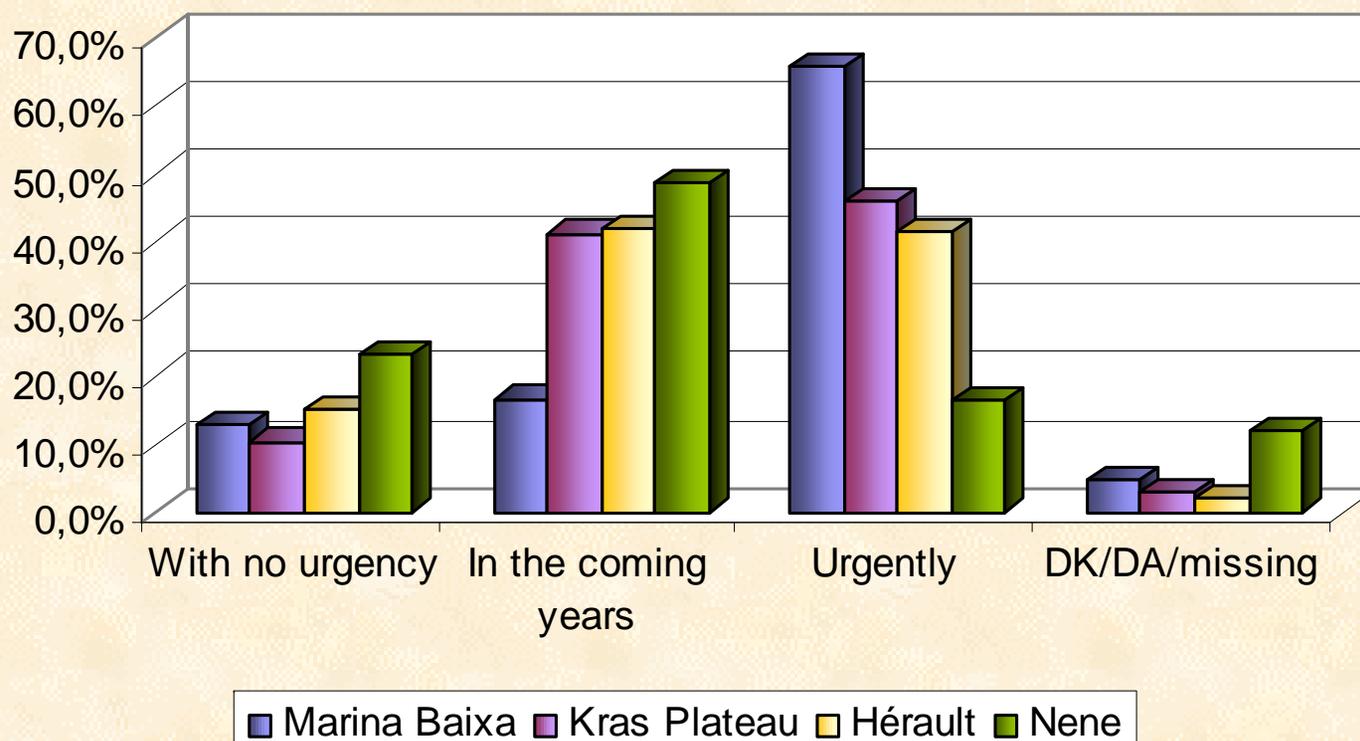
- Data from surveys carried out across Europe suggest that the environment is not a primary concern of Europeans.
- Data from the survey reported here allows us to put some detail on this rather general trend.



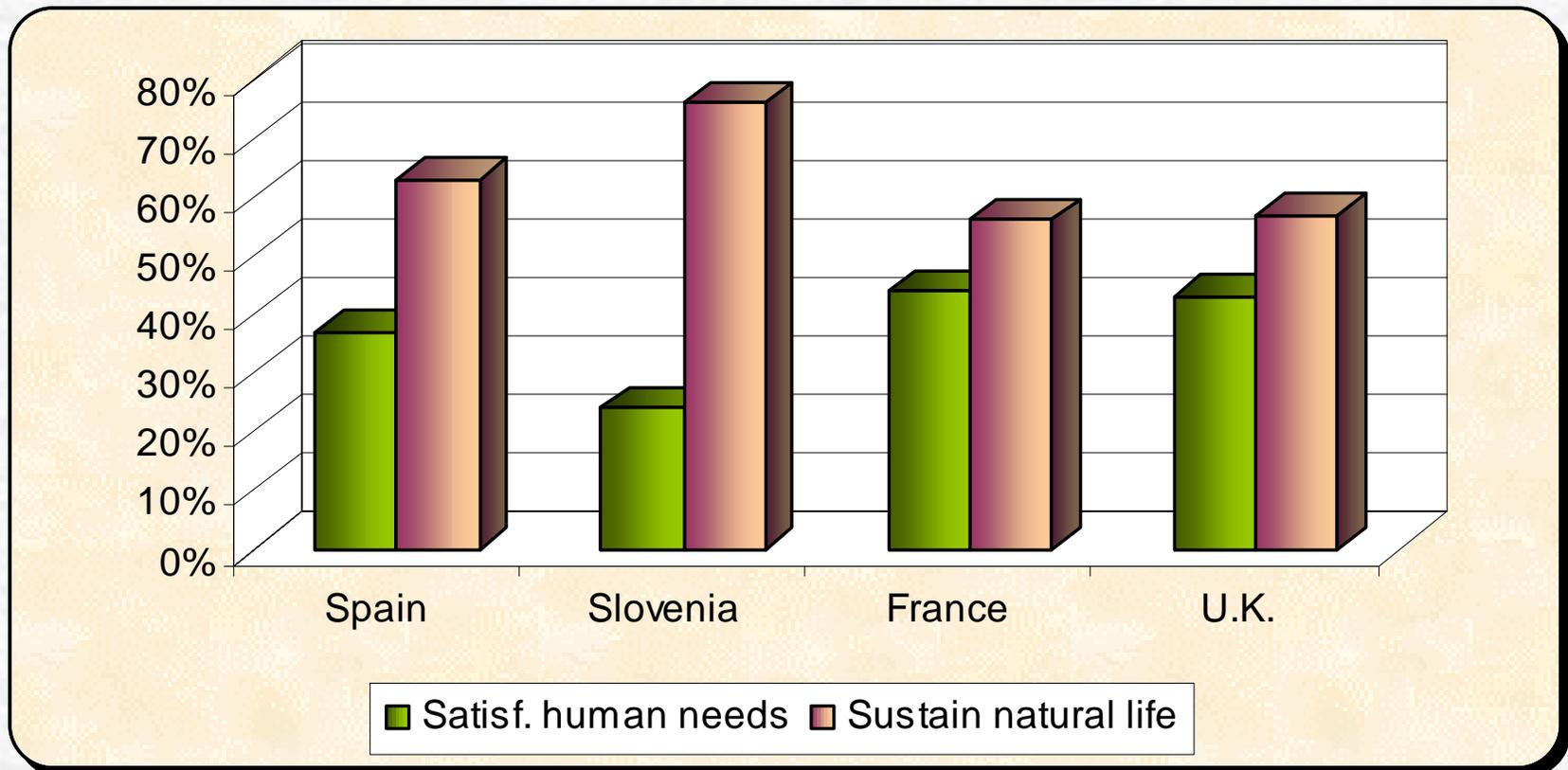
- The environment is not a priority concern for our respondents. In all four countries, “Law and order” is ranked as the highest concern. The environment is ranked sixth by the French, Slovenian and the English samples, while for the Spaniards it is ranked fifth.
- However, water is a sensitive issue, as the following figure shows.

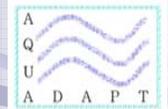


## P5. Is water resource management in your local area an issue that needs to be addressed...?



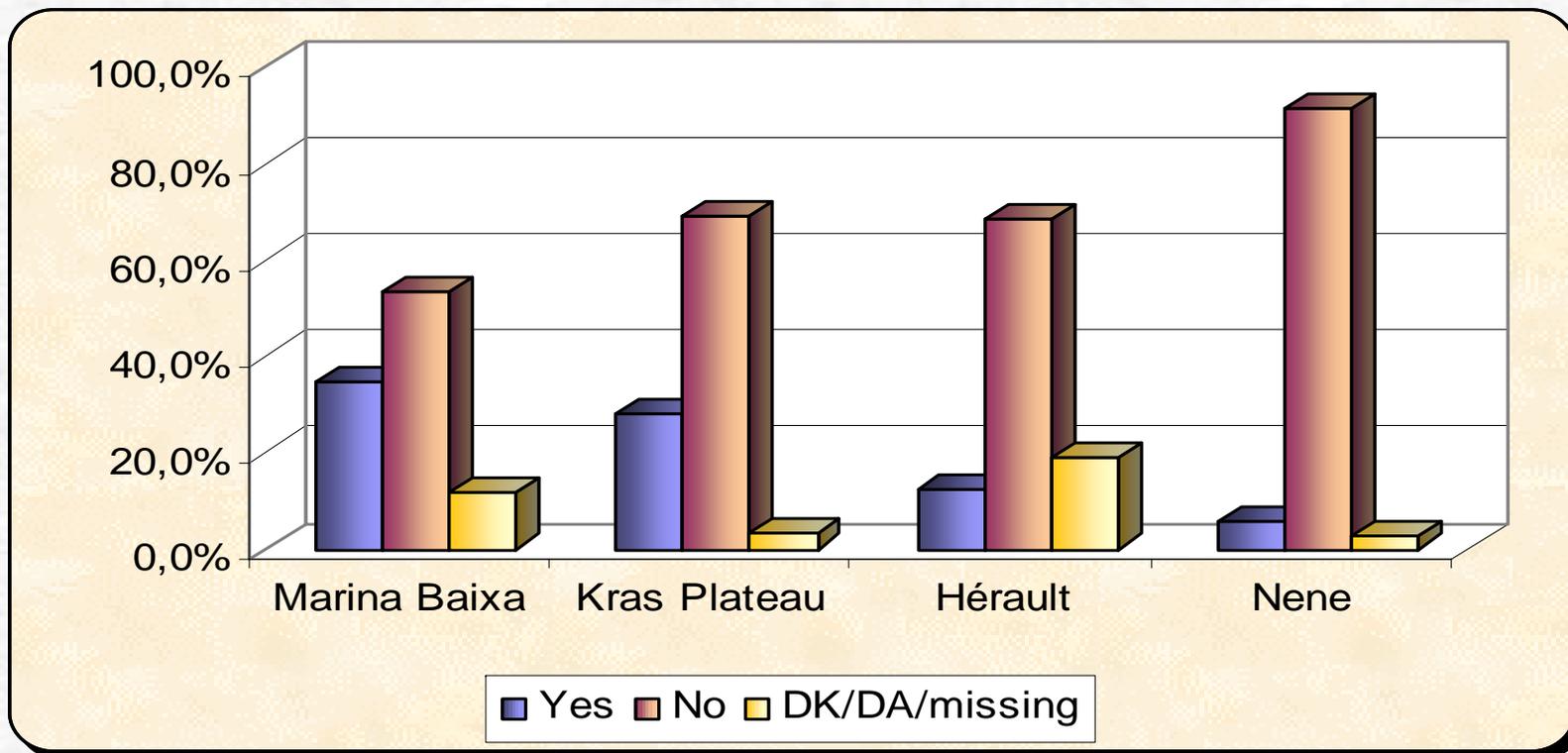
**P.4 Which one of the following statements most closely reflects your views concerning water?  
The main function of water is to....**





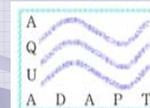
- This concern does not encourage participation in public debates on water issues

**P8. Would you like the opportunity to be involved in discussions and debates on the present and future management of water resources?**

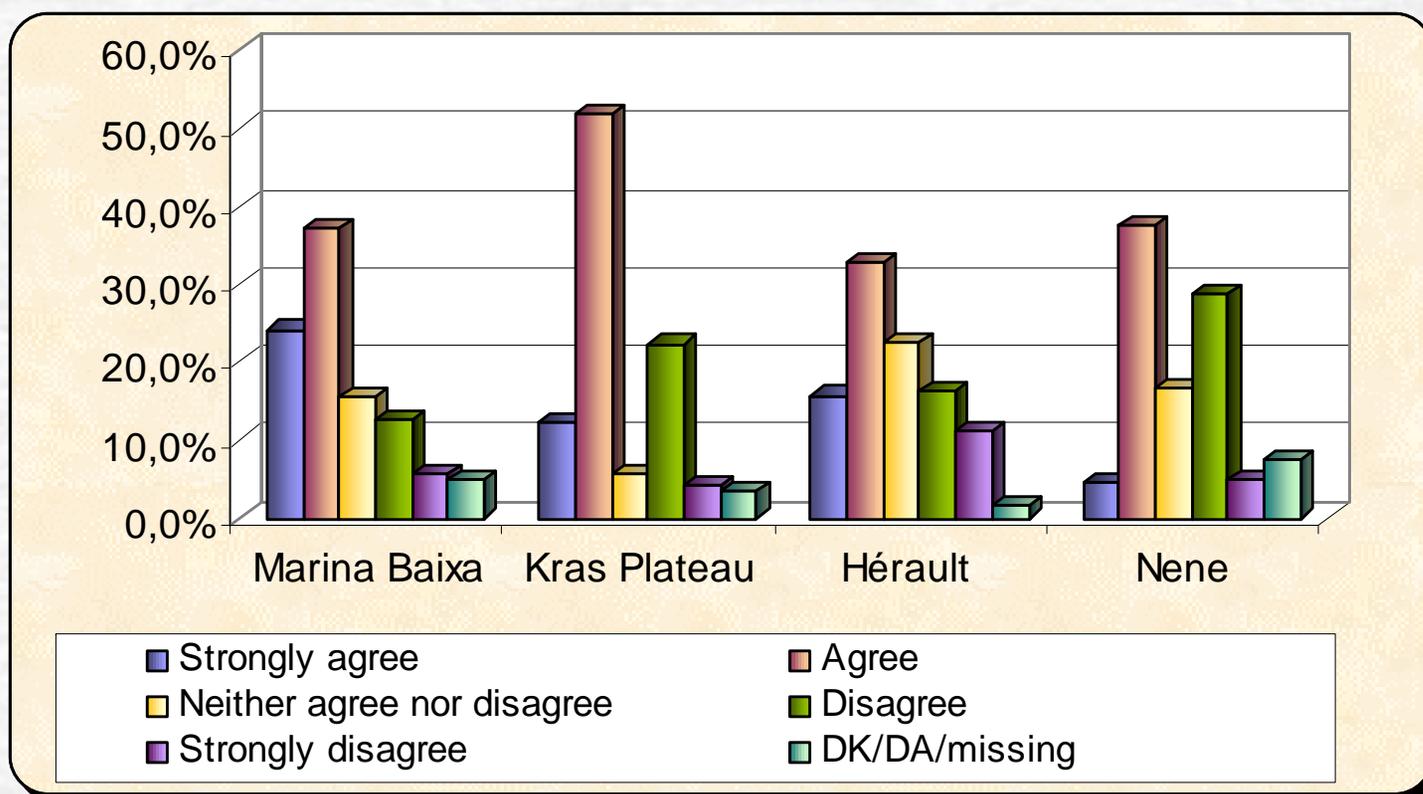


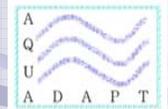


- We detected evidence of water saving attitudes and behaviour in the four case studies.
- The proportion of respondents that ensure that the washing machine and/or the dishwasher has a full load before switching them on is above 80% in the Spanish, Slovenian and French cases.
- Between 84% and 91% indicate they turn off the taps to avoid unnecessary wastage of water.



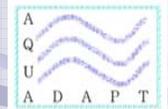
**P37. Do you agree or disagree with the following statement: I would be willing to pay an additional charge in my household water bill to directly support the protection of water in the environment.**





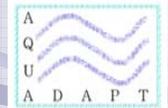
# Significant demographic features

- The socio-demographic variables were crossed with the main basic frequencies.
- These combinations of socio-demographic variables (age, sex, type of living accommodation, ownership of the property, educational level, occupation and number of people per home) have not enabled the identification of groups of respondents with significant differences with regard to their water utilisation patterns.
- Only age and educational level were partially correlated with these aspects of water use.



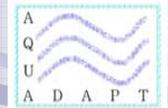
## 2.2 Consumer profile analysis

- This profile analysis categorises types of respondent in terms of (i) their level of concern about water issues, (ii) the extent to which they feel themselves informed about water issues, and (iii) their water saving behaviour.



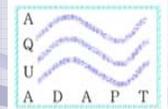
## a) Level of concern about water issues

- A factorial analysis of the data was undertaken and revealed that the population group with the highest level of concern about water issues are young adults with a high educational level.
- Those who are least concerned about water issues are more likely to be older adults with a lower standard of education.



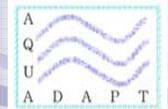
## b) Informed about water issues

- Analysis of this issue involved a two-step cluster analysis which. From this we conclude that the respondents that declare themselves to be well informed about water issues are most likely to be older Slovenian males, of an average age of 53 years.
- Those respondents who indicated that they are uninformed about water issues are most likely to be British women who live in apartments and in rented households.

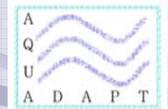


## c) Water saving behaviour

- Analysis focused on the socio-demographic characteristics of the respondents and their more or less active water saving behaviour.
- The Spanish sample with an age range between 61 and 80 years old are the most active in water saving behaviour.
- The least active in this kind of behaviour are the respondents from the Nene catchment and those between 21 and 30 years old.

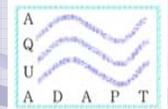


- Those most concerned and more informed are also the most active in water saving behaviours, more willing to get involved in public debates and discussions on water issues and more critical about the price of water.

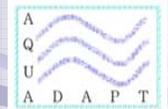


### 3. A shared set of values, attitudes and behaviours

- The relative homogeneity of the results of this survey across the four case study areas indicates a generally positive attitude towards water and its management.
- Specifically, the findings seem to reflect (1) the existence of shared environmentalist values, and (2) a special concern about water.

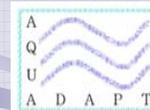


- The coherence of results across the four case studies seems to indicate a shared : a) level of environmental concern, b) agreement on the need to reduce water consumption, and c) water saving behaviour.



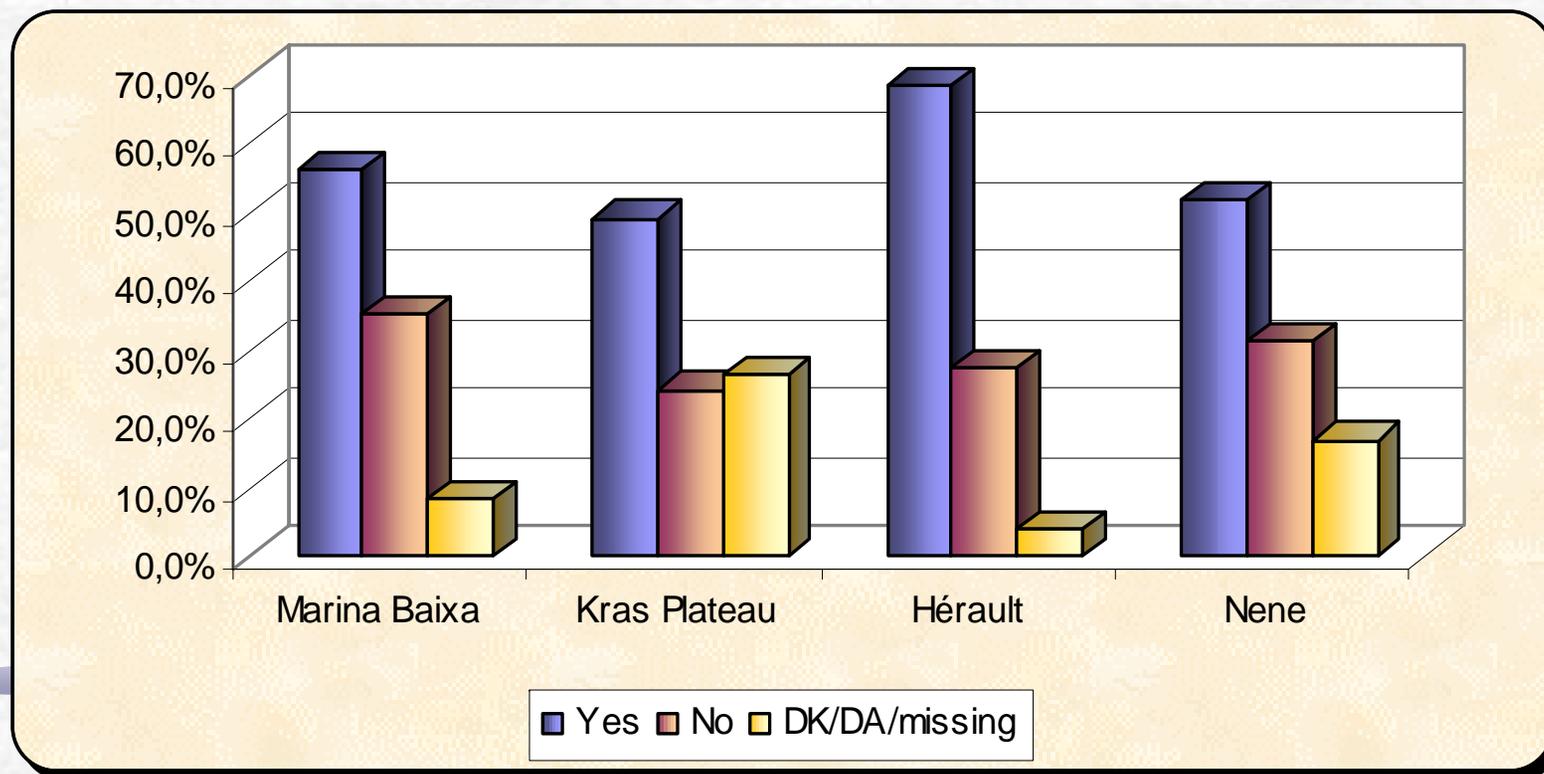
## a) Level of environmental concern

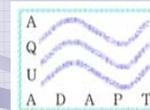
- As stated earlier, the environment is not a priority concern for our respondents. In all four countries, “Law and order” is ranked as the highest concern. The environment is ranked sixth by the French, Slovenian and the English respondents, while for the Spaniards it is ranked fifth.
- We would characterise these issues as *strong* issues or *hard cultural concerns*. On the other hand, concern about environment, housing issues, or international policy are placed into the category of *weak issues* or *weak cultural concerns*.



## b) Agreement on the need to reduce water consumption

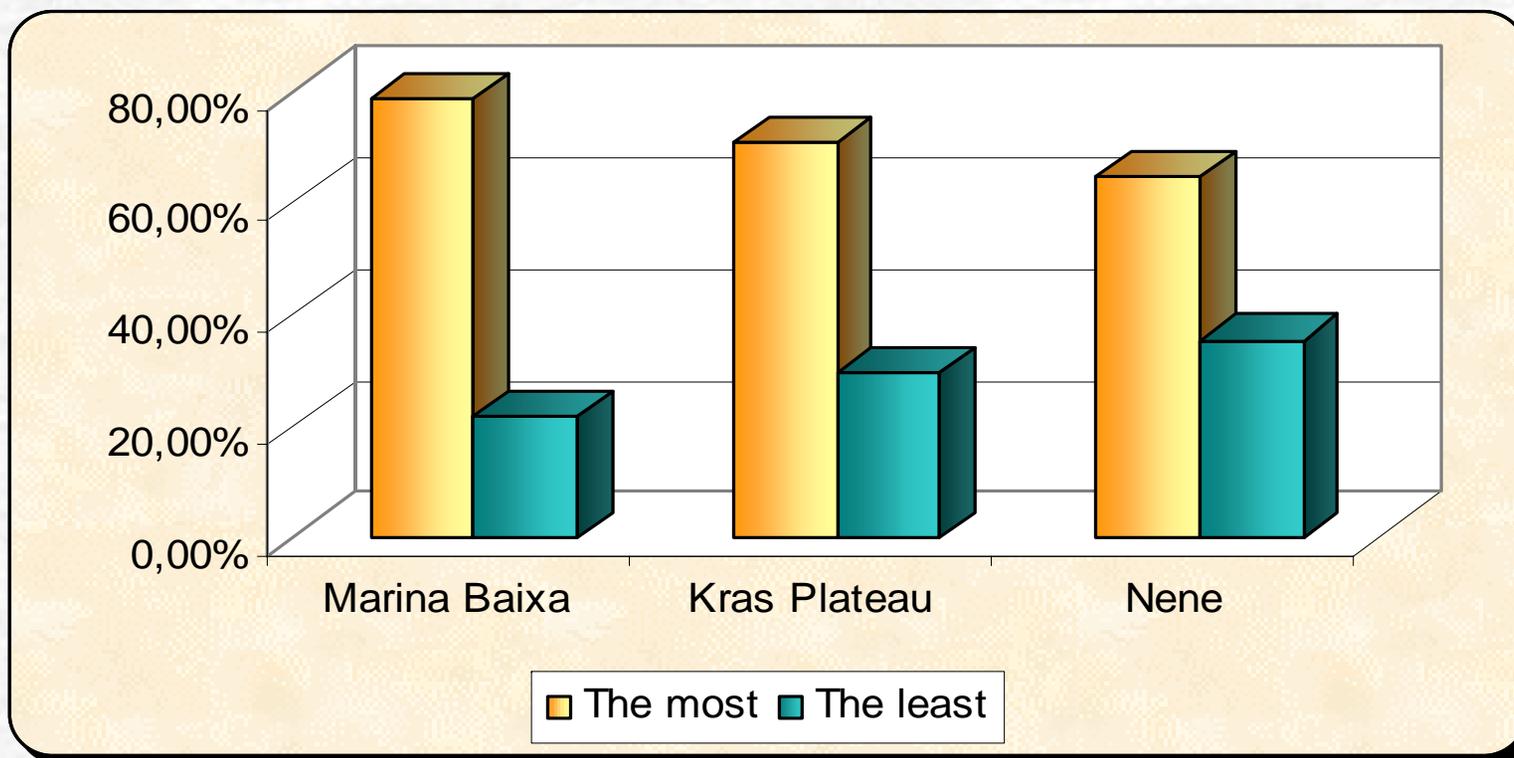
**P34. If a pricing system based on peak use were to be introduced, would you be willing to consider using smaller amounts of water during peak hours and instead switch most of your water use (i.e. garden watering, dishwasher, washing machine and baths) to off-peak times during the day and later at night if it saved you a quarter of your normal household water bill?**

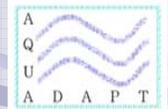




## c) Water saving behaviour

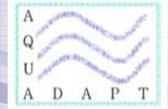
The most / the least active in water saving behaviours by catchment





## 4. Conclusions

- Although the environment and water are not considered as a major problem for European citizens, survey results demonstrate that respondents have a concern about water issues. The high willingness to accept different kinds of measure to decrease water consumption must be taken into account when making decisions to activate such demand side strategies.



- The lack of knowledge about the water cycle and the lack of interest in participating in public debates are the main challenges to be addressed in order to design sustainable strategies of water use.