DISSEMINATION ACTIVITIES AND WATER FOOTPRINT OF THE GUADIANA BASIN

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Basin characterization

- Total area 67,000 km² (83% in Spain, 17% in Portugal)
- Irrigated area 336,000 ha (90% of total water demand)

- 1.5 million inhabitants
- Average rainfall: 550 mm/year
- Average evapotranspiration: 800-1000 mm/year

Dissemination and raising awareness in the Upper Guadiana Basin

Workshop organizers (F. Villarroya from NeWater team on the right and A. Senderos on the left)

Field trip with secondary school teachers. Guadiana river close to Zuacorta, April 2007

These initiatives aim at reaching the general public by targeting key water users and the education community making them aware of:
- the specific characteristics of the Mancha Occidental Aquifer ('Aquifer 23', Upper Guadiana Basin); and
- the problems related to water resources management.

Initiatives include theoretical and practical sessions:
• Workshops for primary and secondary school teachers
• Workshops for farmers
• Science week field trip
• 350 posters were provided to educational institutions by the Regional Ministry of Education

These activities could facilitate the implementation of the Special Plan for the Upper Guadiana (Plan Especial del Alto Guadiana – PEAG) (approved on 24 January 2008)

NeWater team participation in NGO meetings concerning La Mancha wetland desertification
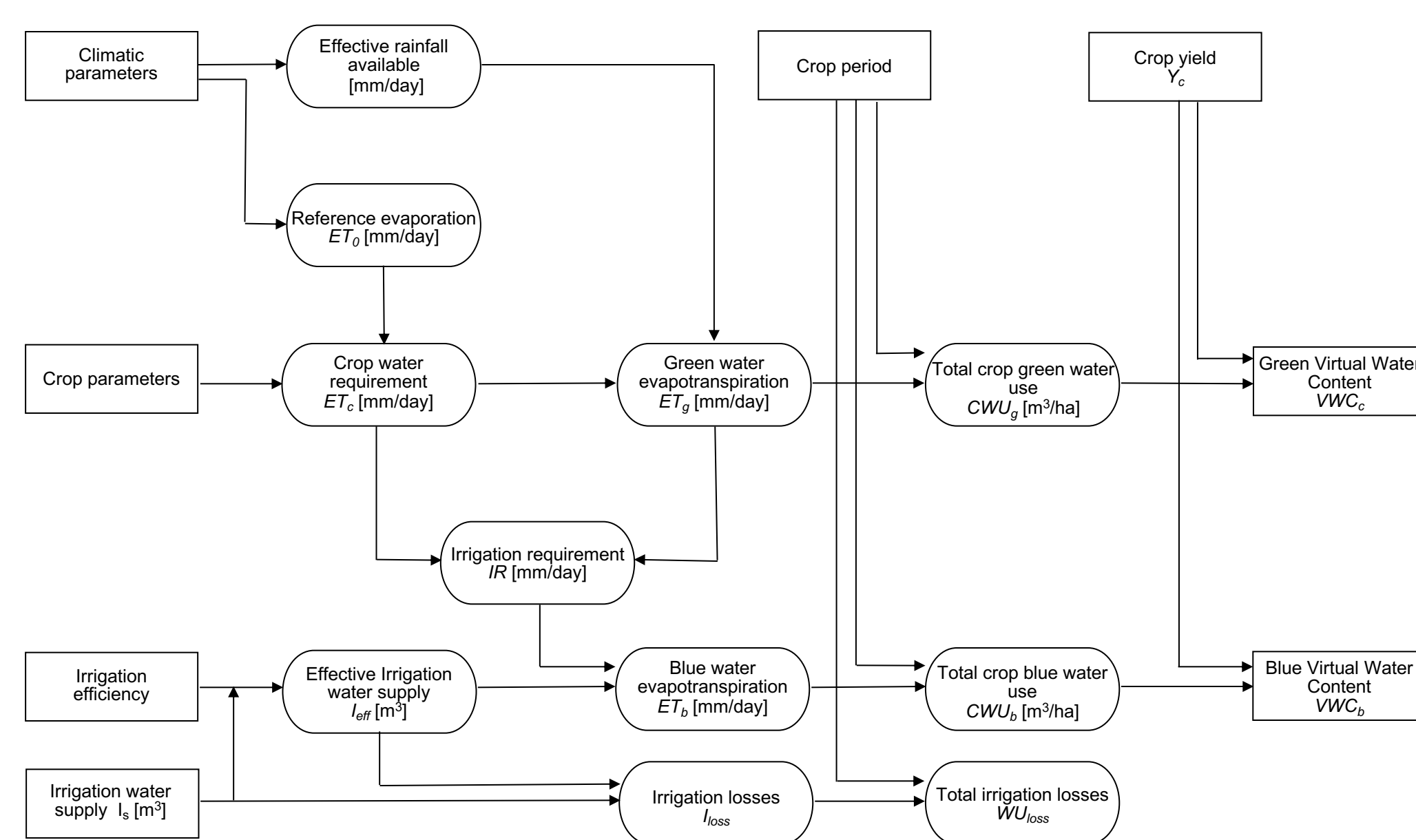

Journal contributions by the NeWater team (P. Martínez-Santos)

Water Footprint and Green and Blue Virtual Water of the Transboundary (Spain and Portugal) Guadiana Basin

•**Virtual-Water** content of a commodity, good or service refers to the volume of water used in its production.
• **Water Footprint** is the total volume of water that is used to produce the goods and services consumed by an individual or community.

• **Method**
FAO CROPWAT model

Agricultural use of water resources (10⁶ m³/year) and economic value (€) in the Guadiana river basin and former lower Guadiana II domain (Year 2001) (Aldaya and Llamas, 2007)

• WP3.4 WF analysis from both a hydrological and economic perspective for the whole Guadiana basin in collaboration, with the Portuguese Water Institute (INAG) and UPM (Aldaya and Llamas, 2007).
• A more detailed analysis at agricultural region level is under preparation (Aldaya and Llamas, 2008).
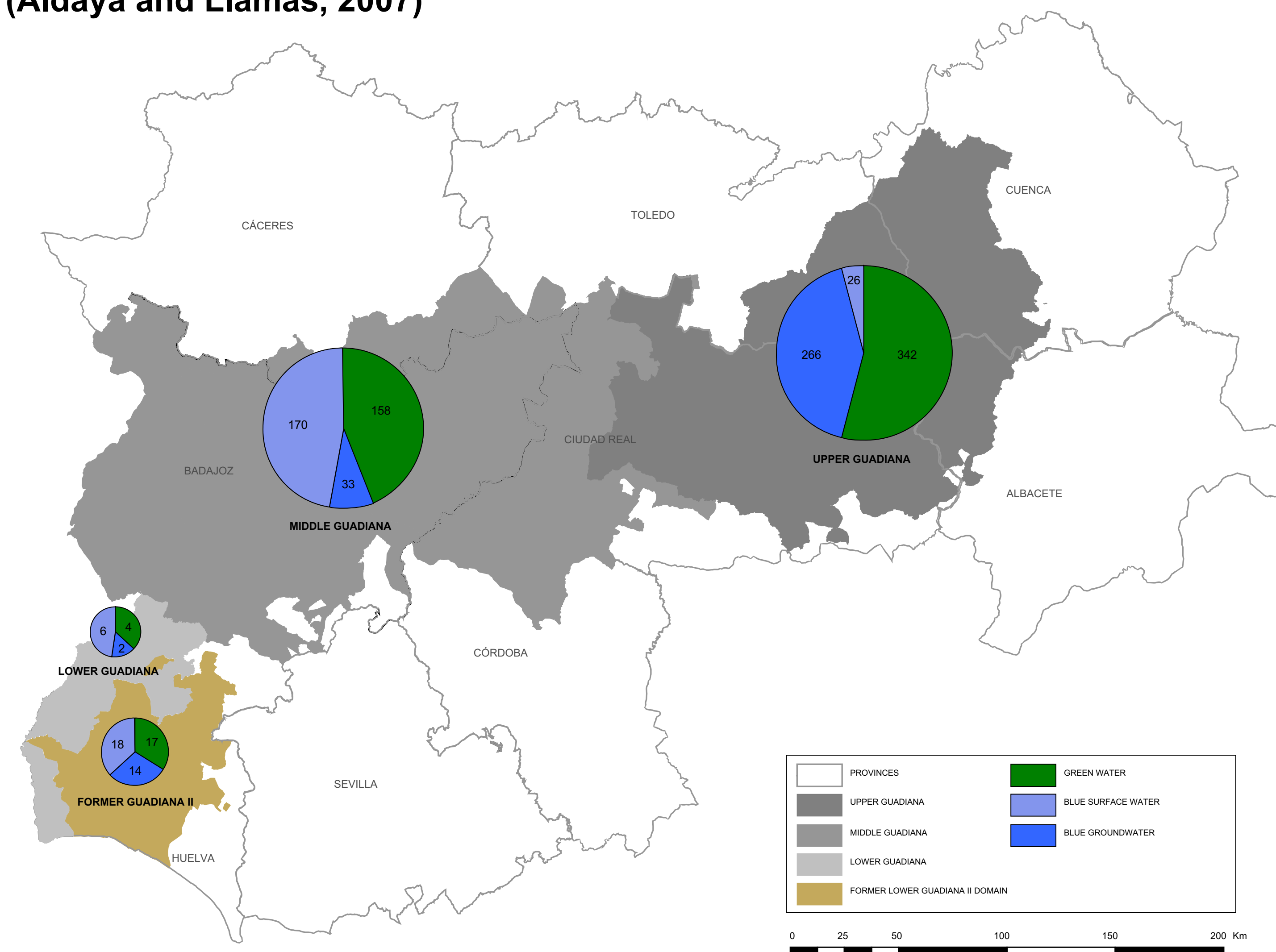
	Area (ha)		Population	Total water use (10⁶ m³/year)		Total water use/ha (m³/ha)		Total economic value (million €/year)		Total economic value/ha (€/ha)		Water economic productivity (€/m³)
	Rainfed	Irrigated		Green water	Blue water	Green water	Blue water	Rainfed	Irrigated	Rainfed	Irrigated	Blue water
Upper G.	1,268,600	262,900	564,500	342	292	525	4,860	320	460	615	2,970	1.6
Middle G.	675,600	201,600	791,100	158	203	610	4,720	240	490	1,080	3,620	2
Lower G.	14,000	3,100	51,100	4	8	1140	6310	4	9	985	4,420	1.3
G. II	70,200	20,100	341,100	17	32	1020	6250	16	70	1,210	4,220	2

References

• Aldaya, M.M. and Llamas, M.R. (2007) Preliminary Report of the Guadiana Water Footprint (hydrologic and economic) within the NeWater project. [online] Available from: NeWater Website/project folders/ WB3/ CS Guadiana
• Aldaya, M.M. and Llamas, M.R. (2008) Draft study of the Water Footprint of Mancha and Don Benito agricultural regions in the transboundary Guadiana river basin (Spain-Portugal) within the NeWater project. [online] Available from: NeWater Website/project folders/ WB3/ CS Guadiana

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