

The background image shows a close-up of a dark, horizontal irrigation pipe. Below the pipe, a small stream of water flows over dark, moist soil. In the foreground, there are some green leaves and a dark, round object, possibly a fruit or a rock. The scene is outdoors, with sunlight filtering through the foliage.

# Irrigation in Spain Strategies for conservation

**Madrid**  
**21February 2010**

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# Strategies for conservation: how are water savings being used, the modernisation of irrigation systems, and the illegal pumping of ground water

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- Irrigation in Spain
- Impact of CAP subsidies on the water bodies status
- Modernization of irrigation systems: Where is the water saved?
- Illegal pumping of ground water: WWF proposal to control
- Proposals





1




Irrigation in Spain




# Agriculture in Spain




## ÁREAS AGRÍCOLAS

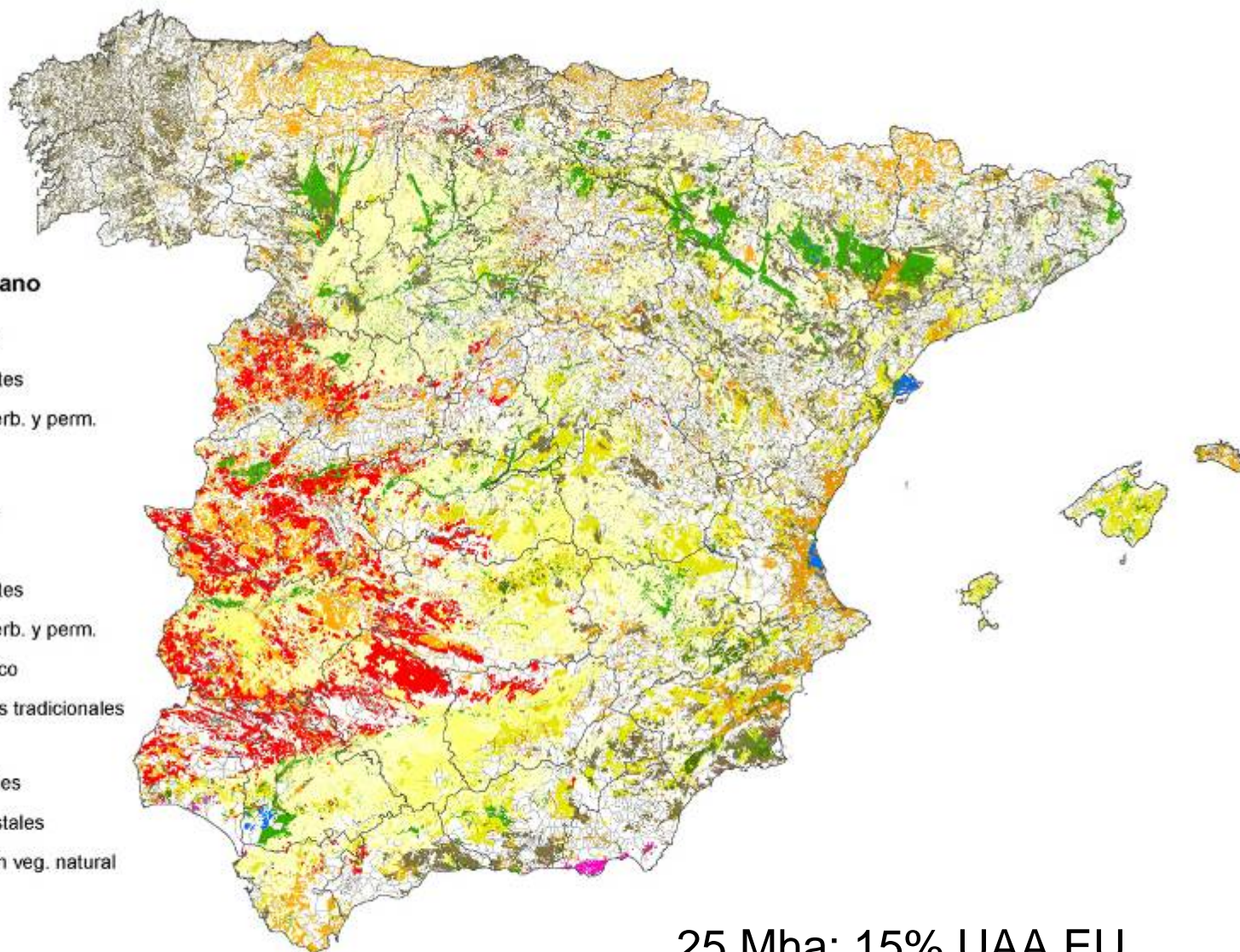
### Tierras de labor en secano

-  Cultivos herbáceos
-  Cultivos permanentes
-  Mosaico de cult. herb. y perm.

### Cultivos de regadío

-  Cultivos herbáceos
-  Arrozales
-  Cultivos permanentes
-  Mosaico de cult. herb. y perm.
-  Cultivos bajo plástico
-  Policultivos regados tradicionales

-  Praderas y pastizales
-  Sistemas agroforestales
-  Áreas agrícolas con veg. natural



25 Mha; 15% UAA EU





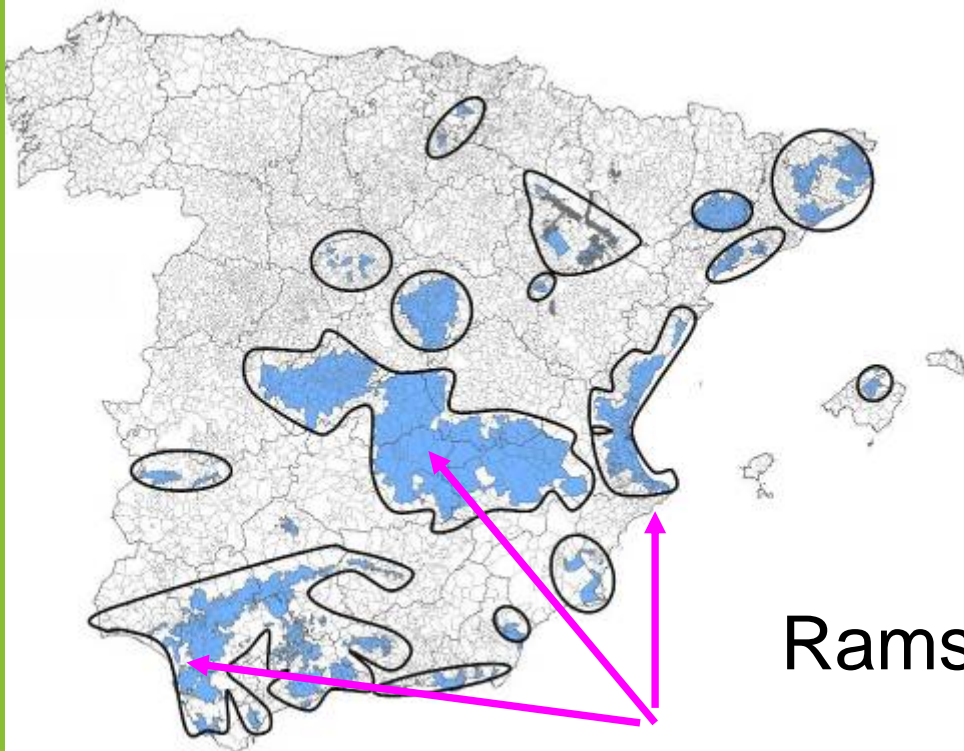
## Irrigation in Spain

- 75% water consumption
- 3,5 Mha (13% Utilized Agricultural Area)
- 1/3 still irrigated by flooding

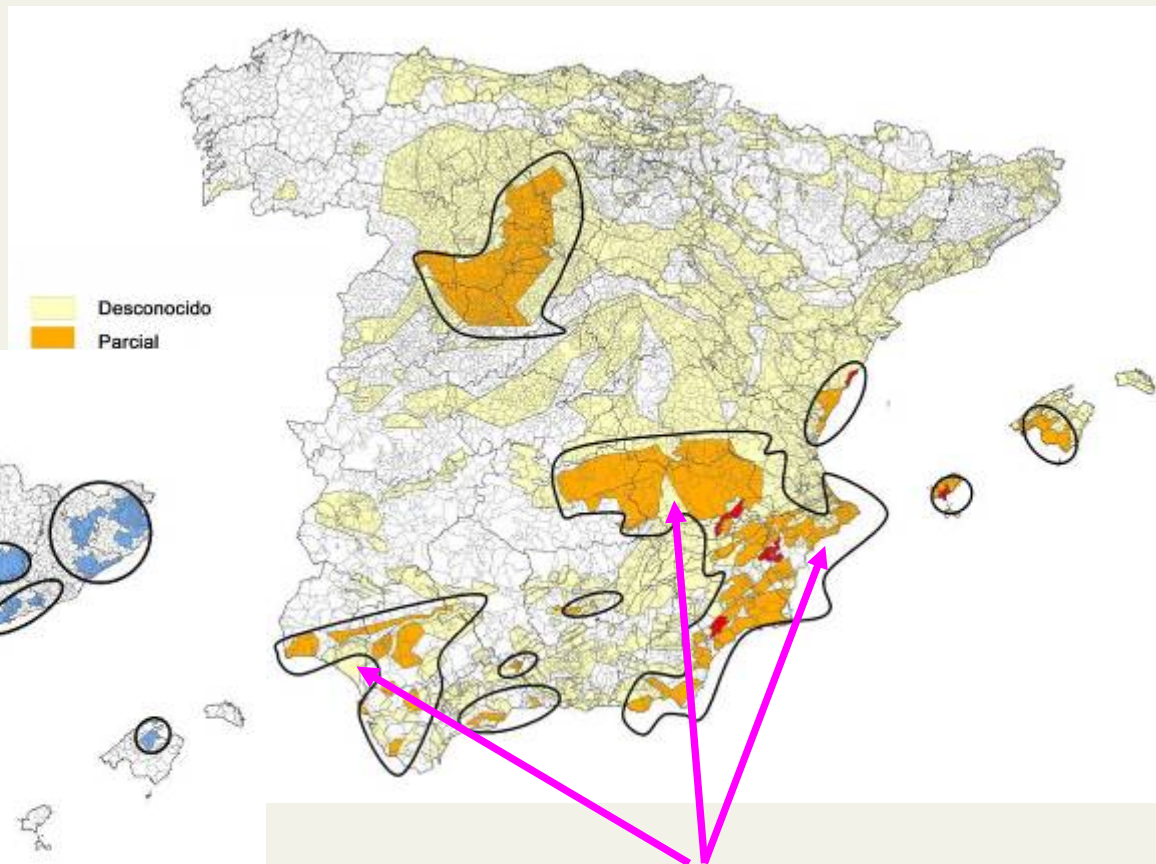


# Agriculture and water

## Agricultural Nitrate Vulnerable Zones



## Overexploited aquifers



## Ramsar/Natura 2000 wetlands



# 2

## CAP and Irrigation: Polluter pays?



# Common Agriculture Policy

- Total Budget EU 2007-2013 > 350 billion euros
- Spain
  - 2nd largest CAP beneficiary (7.5 billion euros/año)



Pilar 1. “Direct payments” and  
“Other payments”

EAGF

77% CAP budget



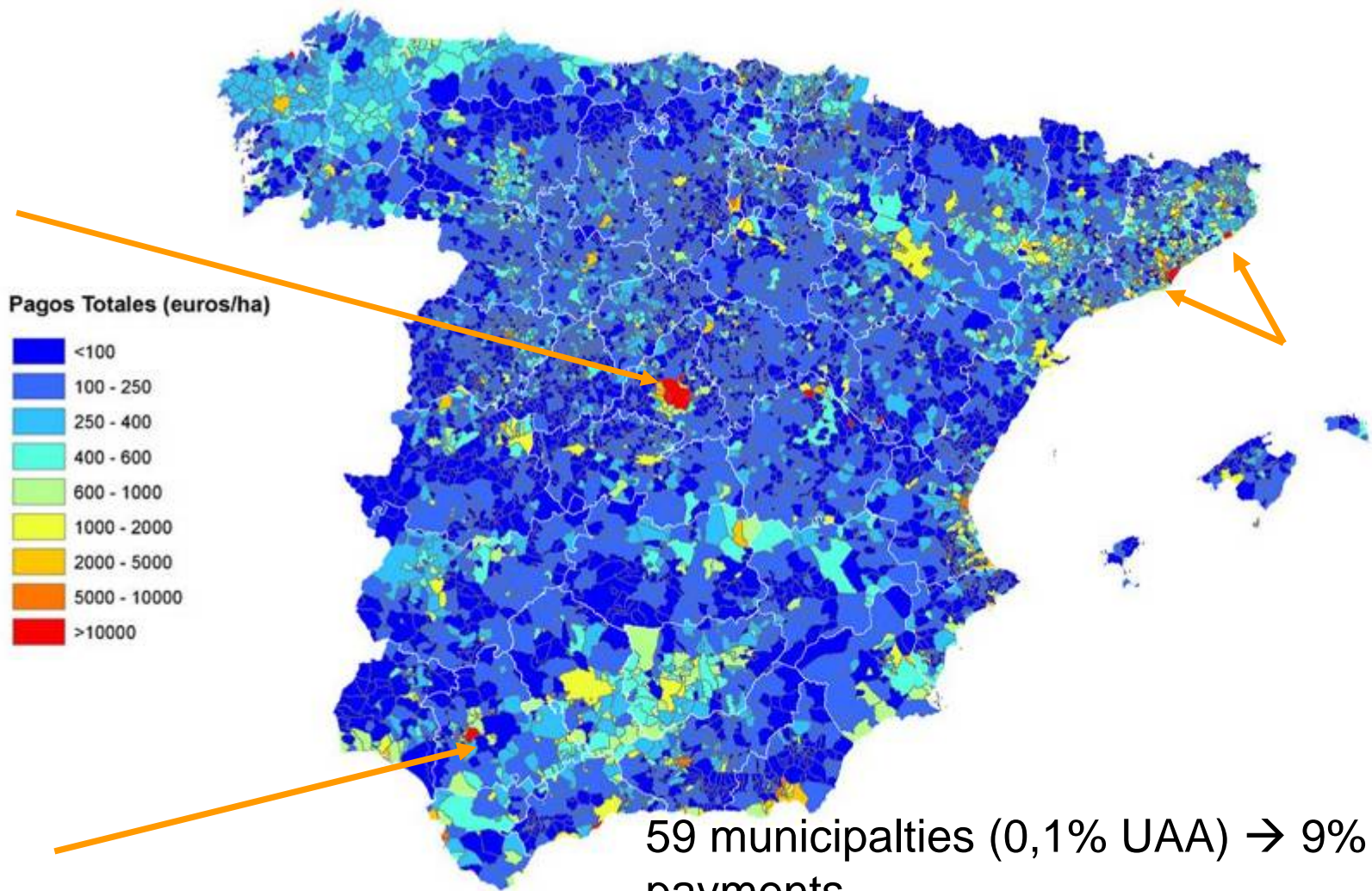
Pilar 2. Rural Development

EARDF

22% CAP budget



# Total payments 2008



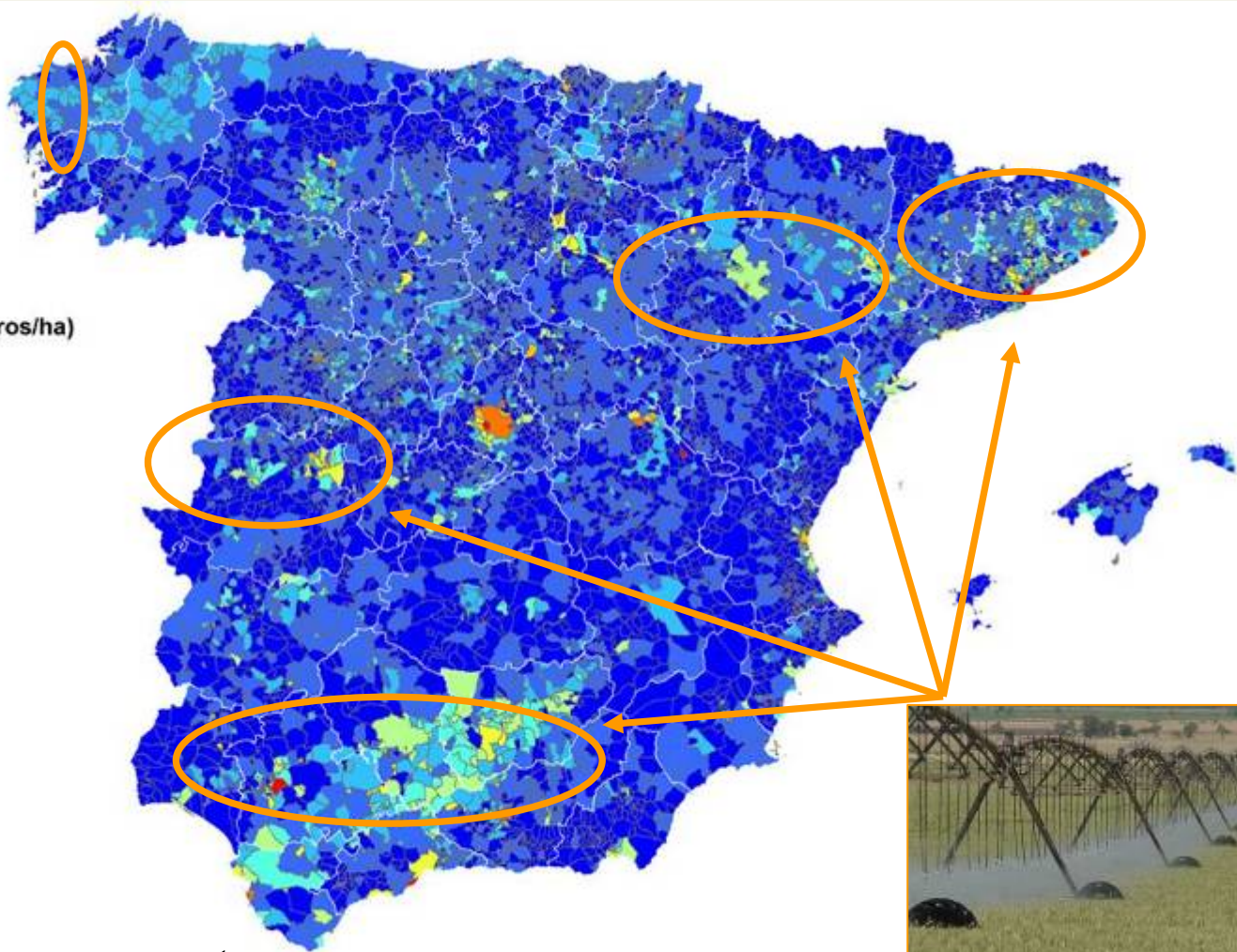
59 municipalities (0,1% UAA) → 9% payments

20% beneficiaries → 54% total payments

# Direct Payment 2008



Pagos directos (euros/ha)

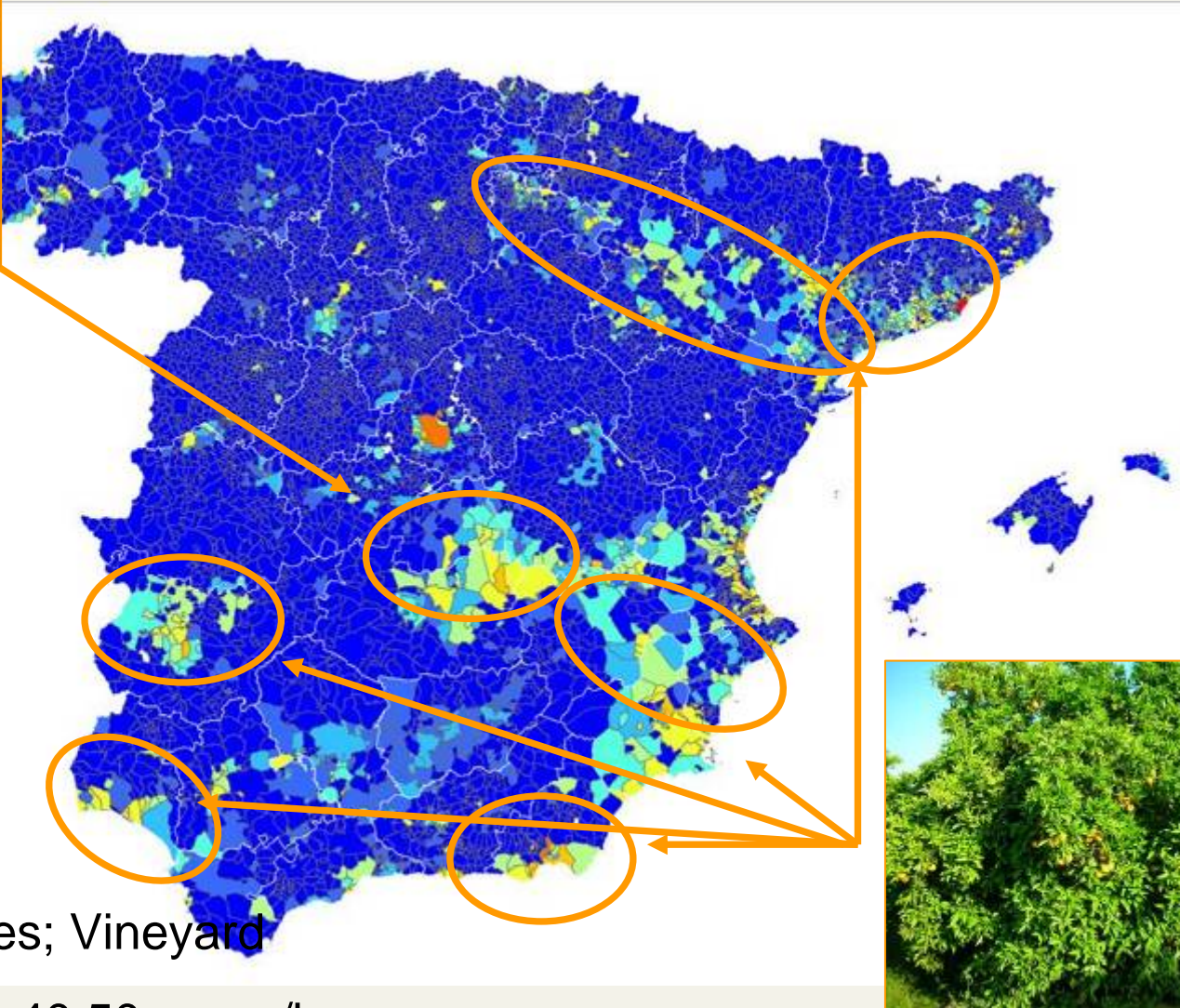


Based on historic payments

**Mean payment:** 183,48 euros/ha



# Other payments 2008



Fruits & vegetables; Vineyard

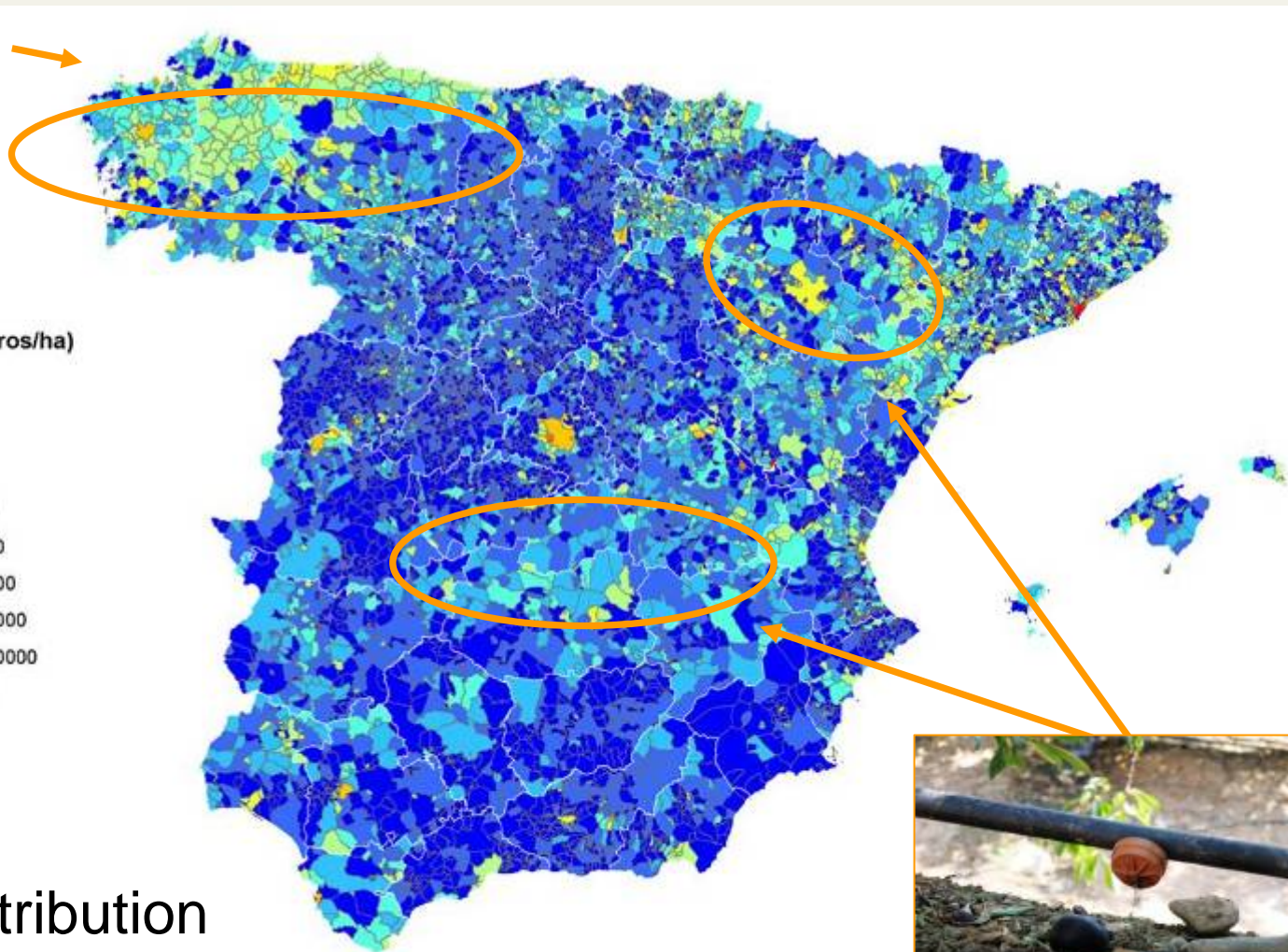
Mean payments: 40,50 euros/ha



# Rural development 2008



FEADER (euros/ha)



More even distribution

**Mean payment: 36,46 euros/ha**





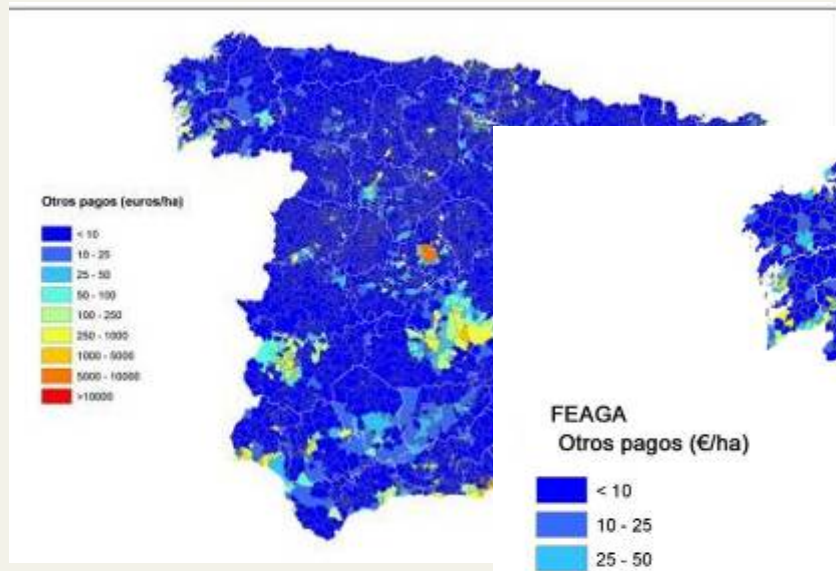
# Main findings

Table 4. Average payment rates (€/ha) by type of system or location<sup>27</sup>

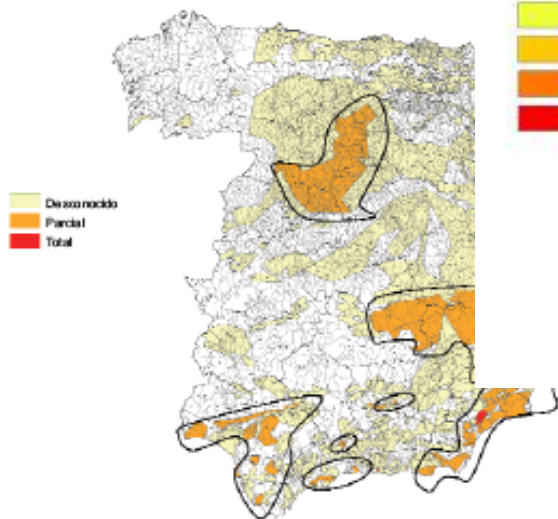
Type of system / area	EAFRD	Other Payments-EAGF	Direct Payments-EAGF	Total Payments
Inside Natura 2000 Network (>50% TA)	51.63	27.22	140.78	219.63
Inside Natura 2000 Network (>90% TA)	47.06	8.34	124.80	180.21
Outside Natura 2000 Network (>50% TA)	57.93	45.57	202.72	306.22
Outside Natura 2000 Network (>90% TA)	57.45	44.59	196.16	298.21
<b>Rain-fed crops</b>	39.45	29.58	211.47	280.51
Irrigated crops	87.13	209.31	321.50	617.94
Pastures	57.90	6.68	159.27	223.85
"Dehesas"	22.10	3.64	103.89	129.63
Permanent crops	54.53	170.62	191.80	417.32
Herbaceous crops	49.50	36.68	277.57	363.75
Over-exploited underground water bodies	26.80	96.69	174.87	302.26
Nitrate Vulnerable Zones (NVZ)	52.70	92.21	232.58	377.49
Irrigated crops in NVZ	74.03	206.56	297.28	577.86
<b>Total Municipalities (UAA&gt;50%TA) – N 4436</b>	<b>60.33</b>	<b>45.02</b>	<b>203.30</b>	<b>308.65</b>

TA: Total Area of Municipality | UAA: Utilized Agricultural Area | N: num. of municipalities included in the category

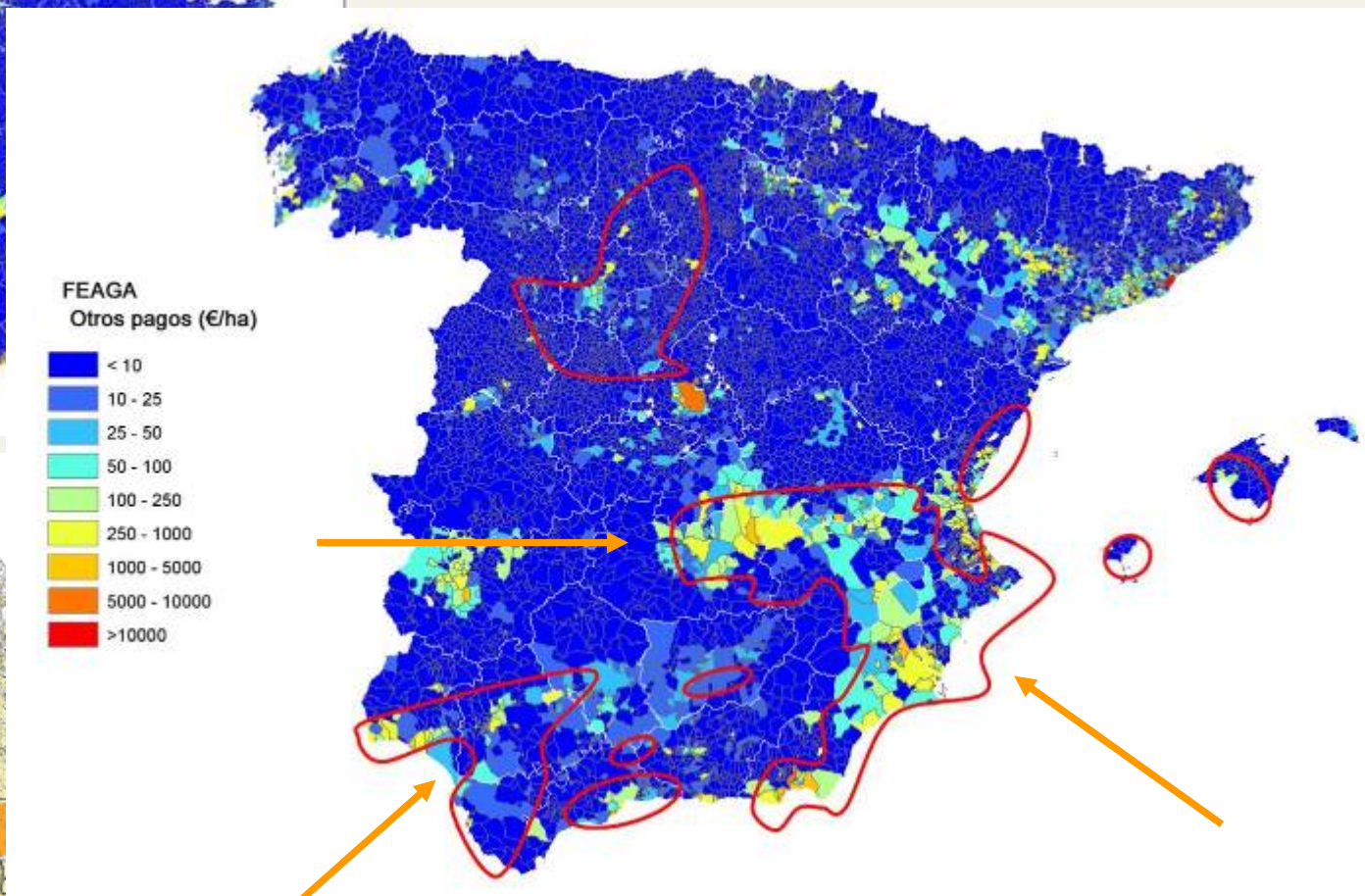
# “Other payments” vs Overexploited aquifers



Mapa 3a. Acuíferos sobre-explotados



Fuente: MARM 2007

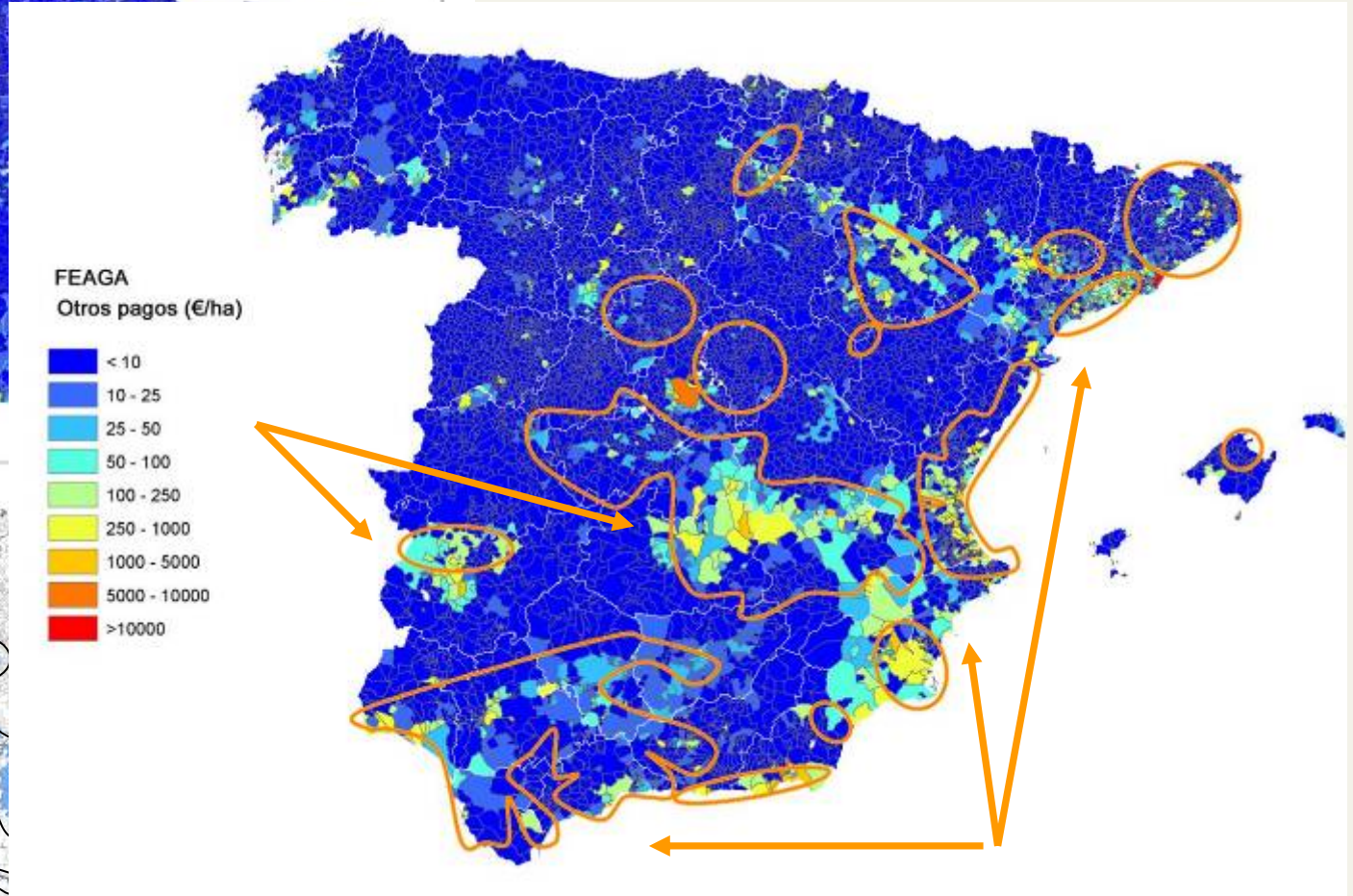
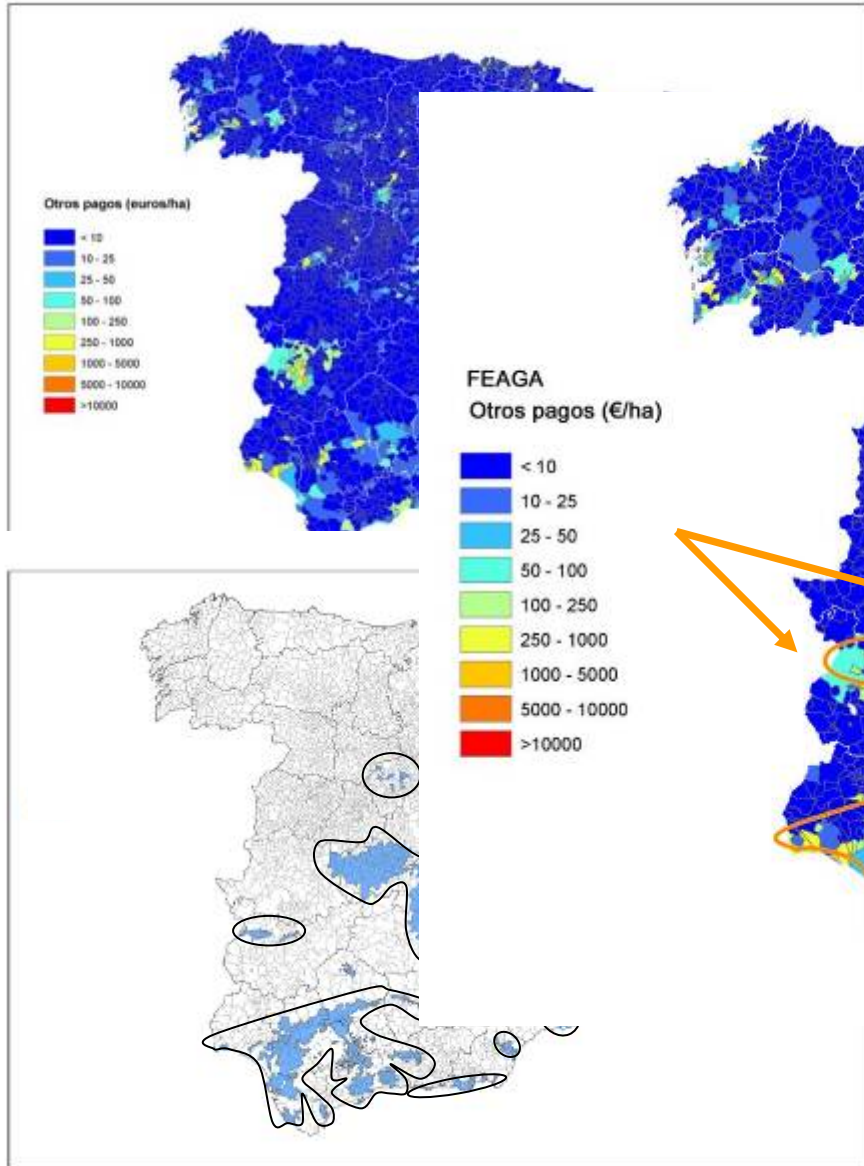


In red. Aprox. limits of overexploited aquifers





# “Other Payments” vs. Nitrate Vulnerables Zones

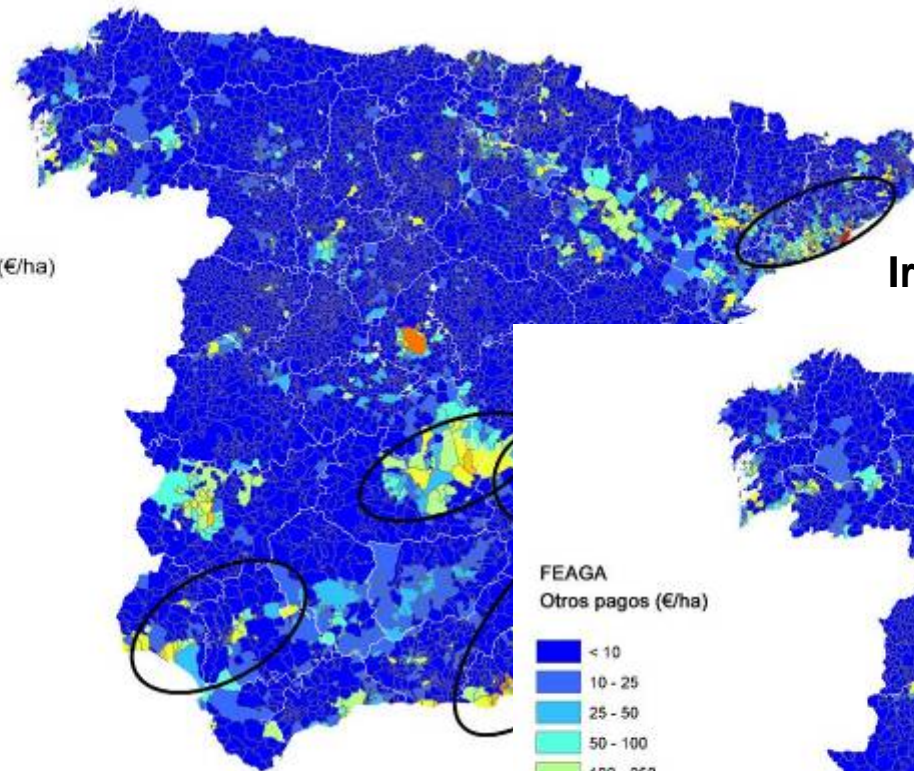


In orange: aprox. limit of Nitrate vulnerable zones

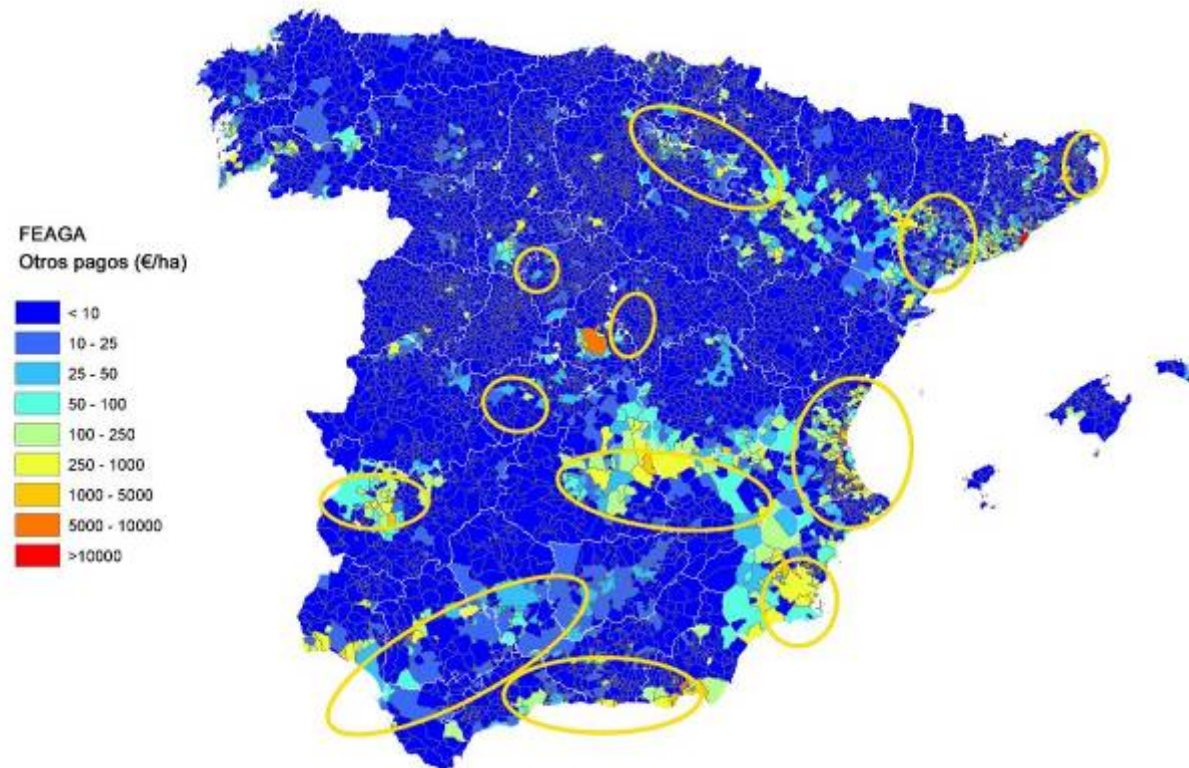


# Other payments vs. Irrigation in overexploited aquifers and NVZs

## Irrigation and overexploited aquifers



## Irrigation and Nitrate Vulnerable Zones



**Natura 2000/Ramsar  
wetlands affected: Doñana,  
Tablas de Daimiel,  
Albufera, Mar Menor...**



# Findings

## **Methodology and information availability:**

- Improve the quality and availability of information (environmental and payment data)
- Continue with more studies and repeat them to detect changes
- Try different approaches (e.g. socio-economic effects) for a more complete vision

**An open, plural debate well-founded in the facts about the current distribution of payments and the effects this produces.**



# Findings

## Distribution of payments

- **Large share** of the funds was absorbed by a **small number of areas or large or intensive enterprises**, benefiting **farming practices with a negative** environmental impact.

## Biodiversity

- Less support was directed at enterprises of higher environmental value (e.g. Natura 2000) → **Contradiction between CAP and Birds & Habitats Directives**

## Natural resources

- Higher payments in areas with overexploited or polluted aquifers
- Higher payments to systems with **high impacts** on **Natura 2000 wetlands**

→ **Contradiction between CAP and Water Framework Directive**

**Incompatibility in Spain between current CAP and EU environment policy**



# Proposals

## **Future of the Common Agricultural Policy**

- Urgent need for changes to the CAP according to the 'public money for public goods' principle
- True application of 'Polluter pays principle', including removal of perverse subsidies and WFD as Legal requirement to get public payments

# 3

## Modernization of irrigation



“Plan de Choque” for  
modernization of  
irrigation 2006 – 2008  
(RD 287/2006)

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- Goal: 1.162  
hm<sup>3</sup>/year of water  
savings;  
Modernization of  
866.898 hectares
- Total investment:  
2.4 billion euros  
(Public investment:  
1.8 billion euros)



But, where is the water saved?



“Plan de Choque” aproved without public participation

WWF information request (2006) on water saved and destination

No answer from the Spanish Ministry although a WWF complaint on lack of information supported by the Ombudsman (2008)

2011, still waiting for response...





## Meanwhile...draft of the New Strategy for Modernization of irrigation

	<b>SUPERFICIE (ha)</b>	<b>ESTIMACIÓN AHORRO AGUA (hm<sup>3</sup>/año)</b>
<b>Actuaciones en el ámbito de red de transporte y regulación</b>	425.633	348,449
<b>Actuaciones en el ámbito de redes de distribución en zonas regables</b>	436.873	782,754
<b>TOTAL ENMSRH 2015</b>	<b>862.506</b>	<b>1.131,203</b>



# WWF proposals

## **Transparency:**

- **Assessment and monitoring of current modernization of irrigation plans.**

## **Public money for public goods and polluter pays**

- **Assurance of real water savings to contribute to WFD objectives,**



# 4

## Illegal use of water



# Current situation

- 510,000 illegal wells (urban and agriculture uses) in Spain → 3,600 hm<sup>3</sup>/year of groundwater extracted illegally → average water consumption of 58 million people









# WWF proposals

- **Legal and efficient use of water compulsory**
  - to receive any public money (CAP, Farming Insurance, etc)
  - to be included into market retailers' buying protocols
  - to get Quality certified labels (Protected Designation of origin, Organic Farming, etc)





## WWF proposals

- **The responsible authorities should be supplied with all the resources to effectively control the use of water**
- **Ensuring the immediate closure of illegal water withdrawal and the prosecution of violators**
- **Improving the coordination among the different authorities and stakeholders**



# WWF proposals

- **Raising awareness**
- **Farming plans have to be subject to environmental objectives:** environmental flows allocation, water pricing that includes real environmental costs, etc.
- **Promoting and supporting non-irrigated High Value Nature Systems.**



# 5

## Summaryzing



Farming policies according to “Public money for public goods” and “polluter pays” principle

Ensure water saved in modernization goes to nature

Stop illegal water use





**Healthy rivers require a sustainable agriculture**  
**Only healthy rivers make agriculture possible**

Thank you

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