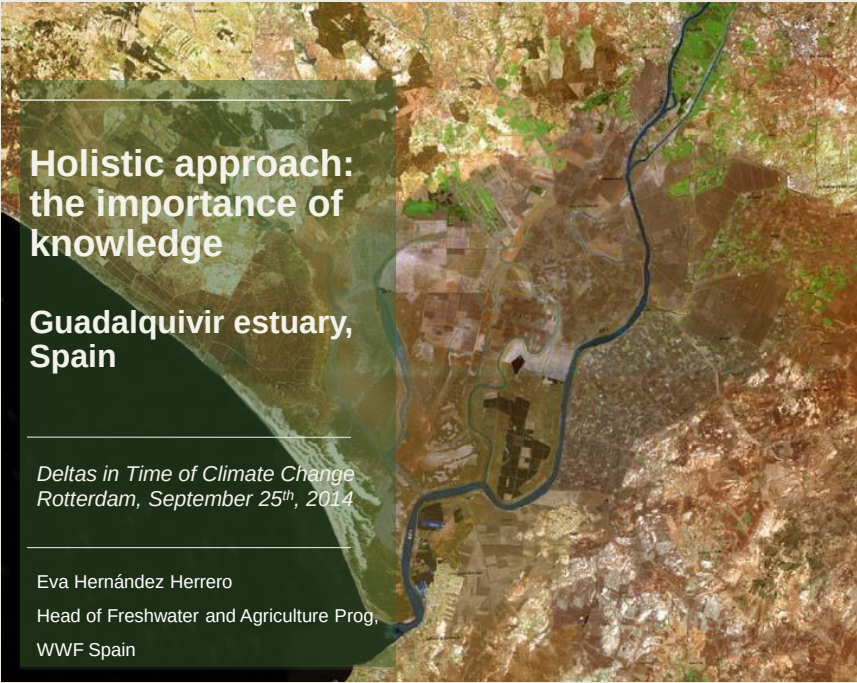




 WWF

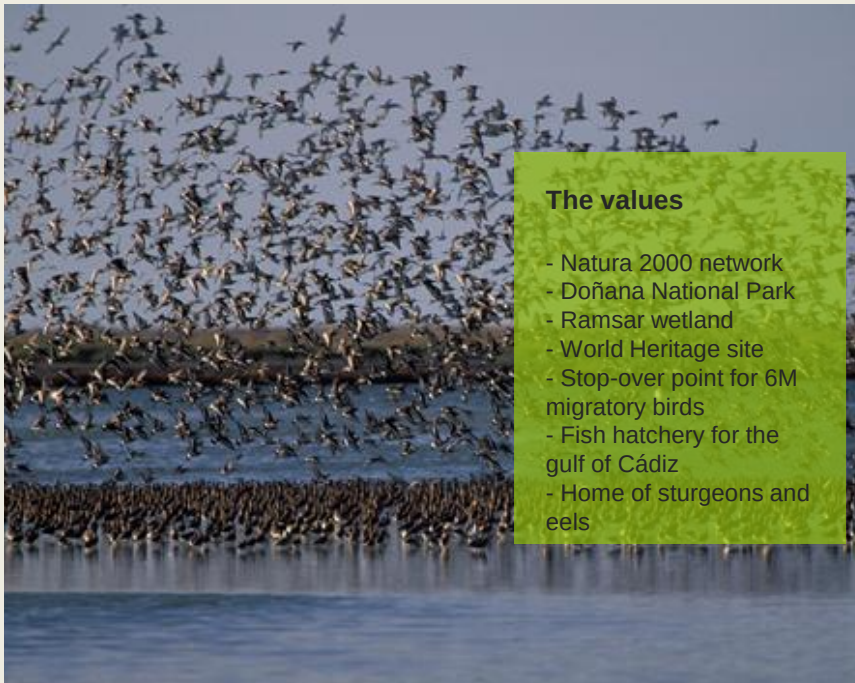
Holistic approach: the importance of knowledge

Guadalquivir estuary, Spain

*Deltas in Time of Climate Change
Rotterdam, September 25th, 2014*

Eva Hernández Herrero
Head of Freshwater and Agriculture Prog,
WWF Spain





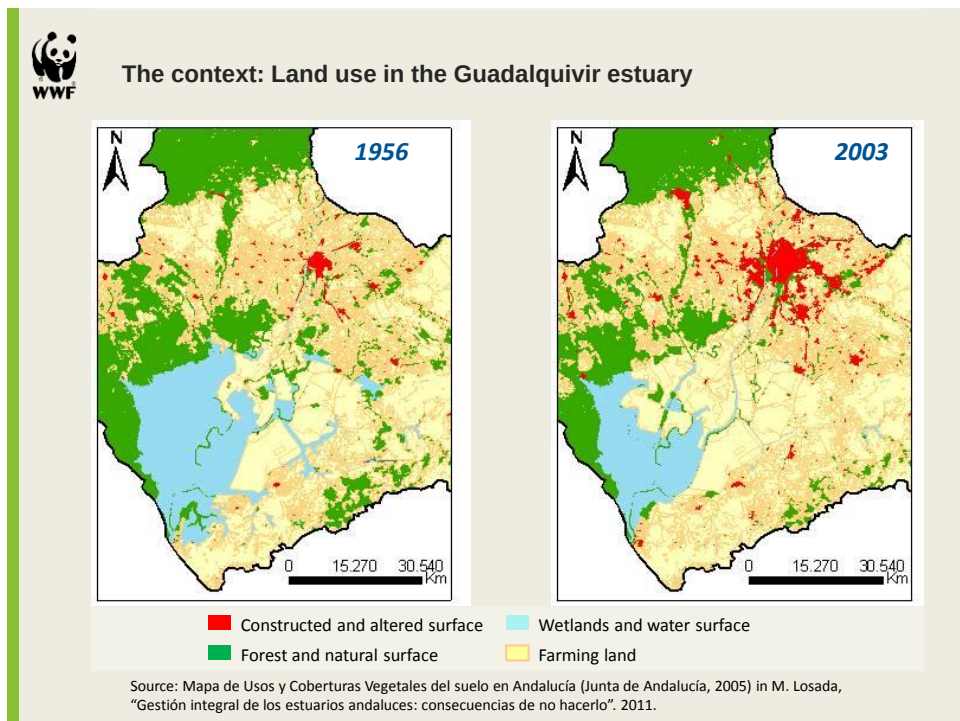
The values

- Natura 2000 network
- Doñana National Park
- Ramsar wetland
- World Heritage site
- Stop-over point for 6M migratory birds
- Fish hatchery for the gulf of Cádiz
- Home of sturgeons and eels

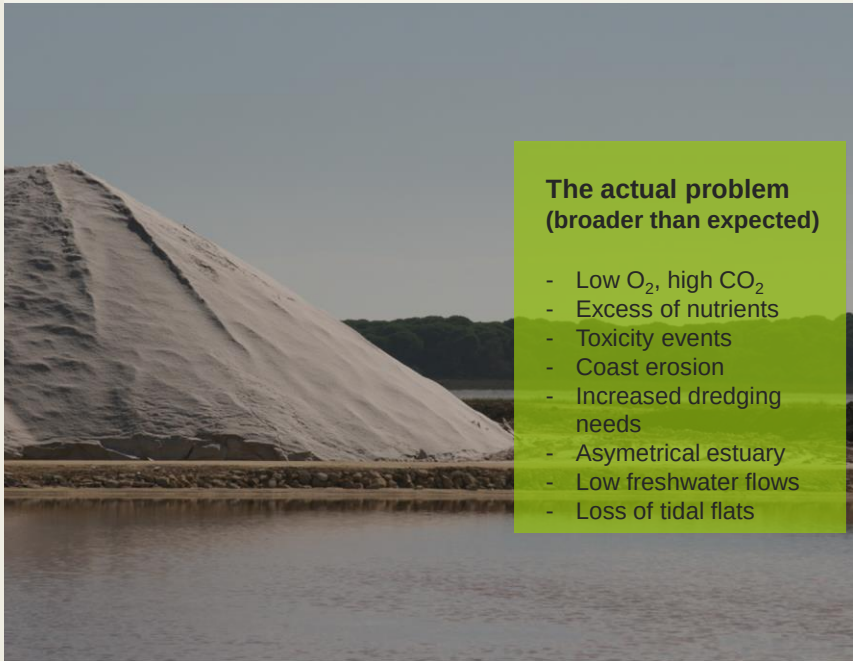
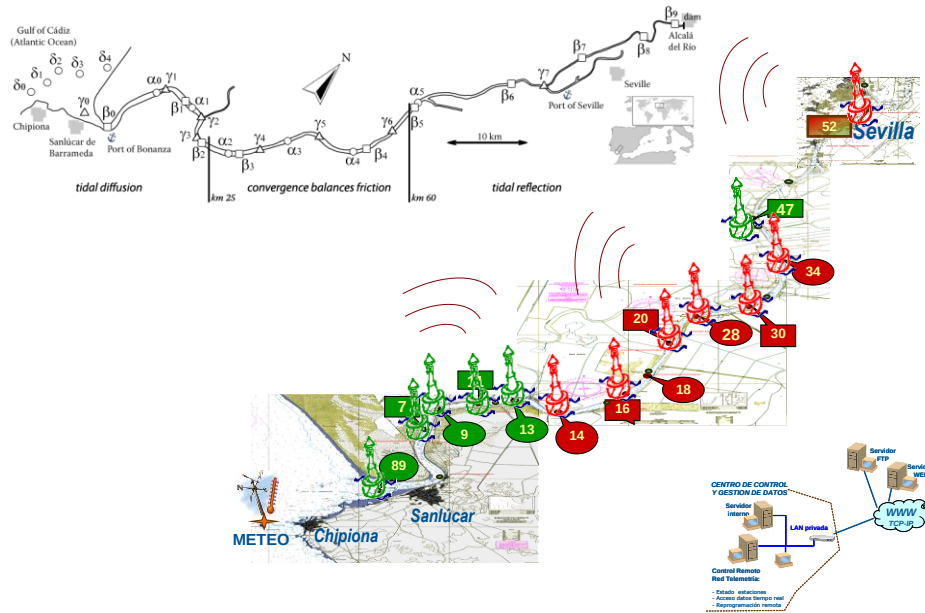


The symptoms

- High turbidity
- High salinity
- Bank erosion
- Species loss
- Invasive species



The knowledge: joint work of 10 research centres



The actual problem (broader than expected)

- Low O₂, high CO₂
- Excess of nutrients
- Toxicity events
- Coast erosion
- Increased dredging needs
- Asymmetrical estuary
- Low freshwater flows
- Loss of tidal flats





Thank you

Rotterdam
September 25th, 2014

ehernandez@wwf.es
www.wwf.es