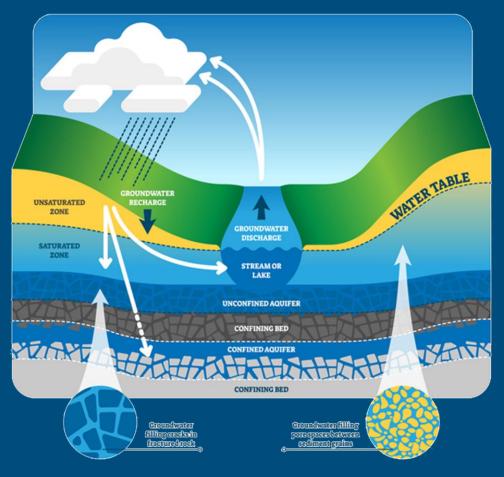
Governing groundwater: Achieving the SDGs through accelerating inclusion and participation

UNDP-SIWI Water Governance Facility, IWRA, IW:LEARN, UNESCO, Government of Slovenia







Co-managed aquifer recharge in Spain

Enrique Fernández-Escalante TRAGSA

and

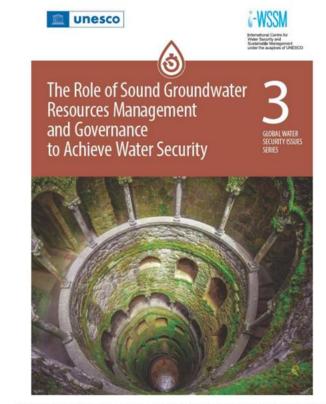
Elena López Gunn ICATALIST





Main message: Co-managed aquifer recharge

- A "space for collaboration" is created based on trus
 on the fair use of (ground)water resources, with
 strong functional organizational structures that help
 take decisions with direct positive outcomes on
 improved groundwater quality and quantity.
- This space becomes the basis for new governance arrangements that are better suited and more responsive to the collective interest of all users.



The Role of Sound Groundwater Resources Management and Governance to Achieve Water Security, I-WSSM-UNESCO.

The GWSI Series 3 is officially on the UNESCO Digital Library website. The 3rd volume includes cases from more than 10 countries. 280 pg, 2021. ISBN: 978-92-3-100468-1

The first chapter defines de Co-Managed Aquifer Recharge concept (Co-MAR) and exposes a good Spanish example in which stakeholders intervene in IWRM in close cooperation with water authorities and «stakehomers».



Summary

2

3



Hard structural measures - managed aquifer recharge

Soft nonstructural measures - creation of groundwater user groups

"space for collaboration" for co-management of conjunctive use of water resources.



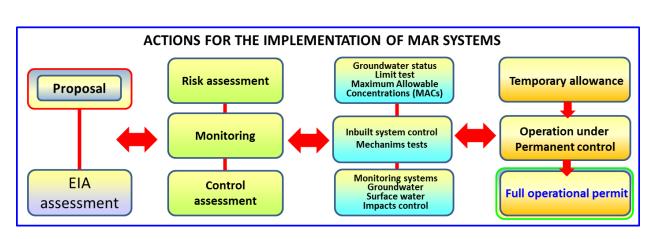
Hardware and Software

MAR +

(managed aquifer recharge)

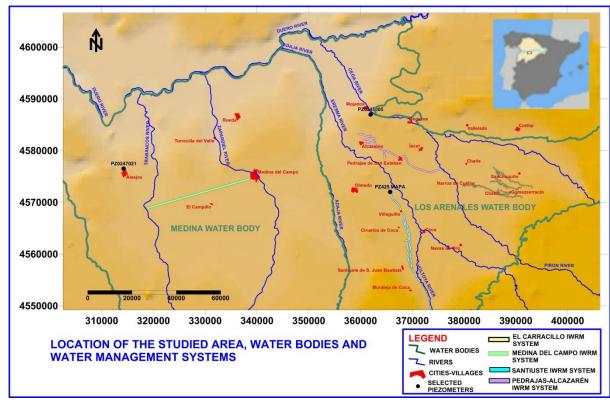
CUAS

(groundwater user groups)





Case study location – comanaged MAR



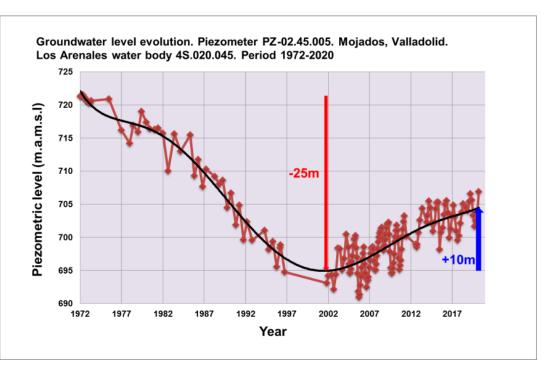


Figure. Piezometric evolution of Los Arenales water body (1975-2020)

(source: authors 'own based on open data publicly available from: <u>chduero.es</u>, 2020)

Example El Carracillo, Medina del Campo, Cubeta de Santiuste de San Juan Bautista and Alcazarén, and the experiences and socio-te changes from the introduction of Managed Aquifer Recharge (MAR)



Thank you! Gracias!

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