



REVIEWER'S REPORT

Manuscript No.: IJAR-57403

Title: Évaluation de l'aptitude à l'irrigation des eaux souterraines du Quaternaire de la partie sud du Marais Poitevin (Nouvelle-Aquitaine France) et de son substratum carbonaté de l'Oxfordien supérieur

Recommendation:

- Accept as it is
- Accept after minor revision.....
- Accept after major revision**
- Do not accept (*Reasons below*)

Rating	Excel.	Good	Fair	Poor
Originality			x	
Techn. Quality		x		
Clarity			x	
Significance		x		

Reviewer's ID: JPR-171

Detailed Reviewer's Report

This study evaluates the irrigation suitability of Quaternary and Upper Oxfordian groundwater in the southern Marais Poitevin using standard hydrochemical indices. While the topic is relevant for water management in a vulnerable wetland-agricultural system, several major issues require correction. First, the data were collected in February 2007 – nearly two decades ago. The manuscript does not justify why such outdated data are still representative, given likely changes in land use, agricultural practices, and groundwater quality. The authors must either update the dataset or provide a strong rationale for using historical data. Second, the methodology section contains duplicated text (pages 3–4 and 7–8 show nearly identical paragraphs), and several figures (e.g., Figures 2, 4) are referenced but missing or incomplete. Third, the sampling design is poorly described: the number of wells per aquifer and the rationale for selecting specific sites are unclear. Fourth, the study uses a single sampling campaign (winter); seasonal variations in salinity and irrigation indices are ignored, which is critical for agricultural water management. Fifth, the discussion makes strong claims about “suitability” based on indices alone, but does not integrate actual crop types, soil drainage characteristics, or local irrigation practices – limiting practical relevance. Sixth, numerous typographical and formatting errors persist (e.g., inconsistent units: “mS.cm⁻¹” should be “µS/cm” or “mS/m”; missing spaces). The English/French bilingual abstract is acceptable, but the main text should be consistently in one language.

The authors must re-evaluate temporal relevance, correct structural and visual omissions, provide complete raw data in a supplementary table, and temper conclusions to reflect the preliminary nature of a single-season survey. Major revision is required before resubmission.