DOES DROUGHT MANAGEMENT CARE ABOUT NATURE? GAPS IN THE CONSIDERATION OF FRESHWATER ECOSYSTEMS

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BACKGROUND

Freshwater ecosystems (FE) are under most pressure. The resilience of human systems to drought is inextricably intertwined with the health of ecosystems. Thus, drought management has to ensure that drought events do not jeopardise the sustainability of ecosystems in general and freshwater ones in particular.

METHODS

Systematic review of **drought risk management instruments in 26 case studies** worldwide.

Case identification and document search

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Eligibility

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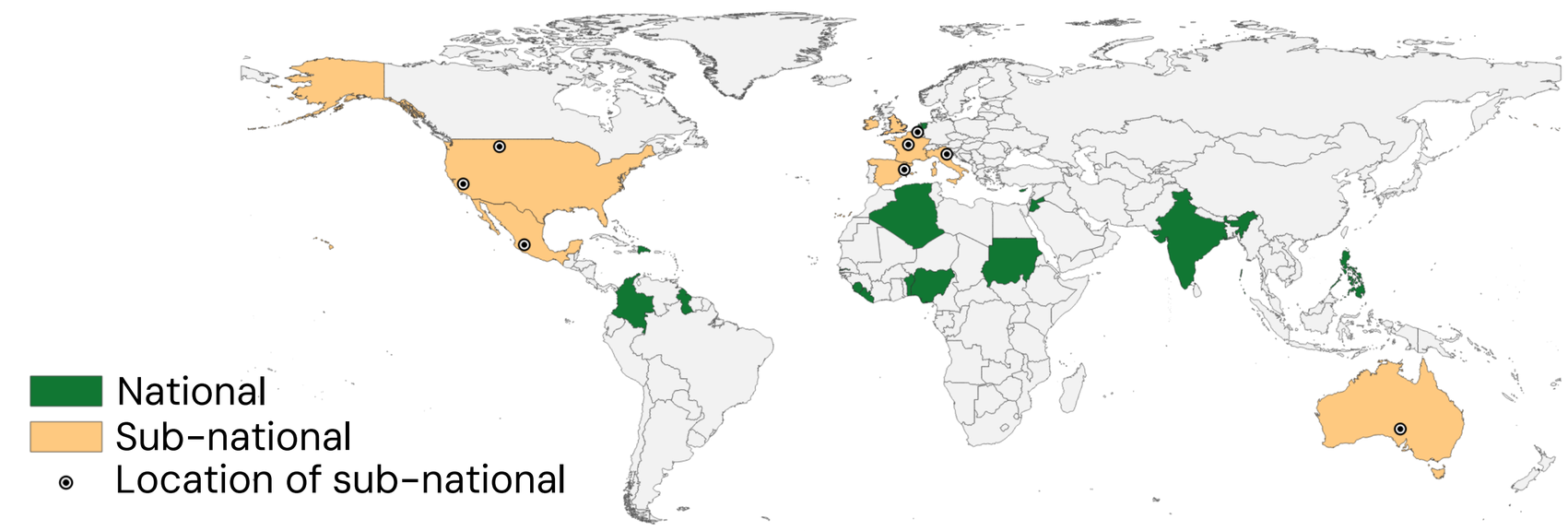
Data extraction through protocol

MORE INFOMATION?

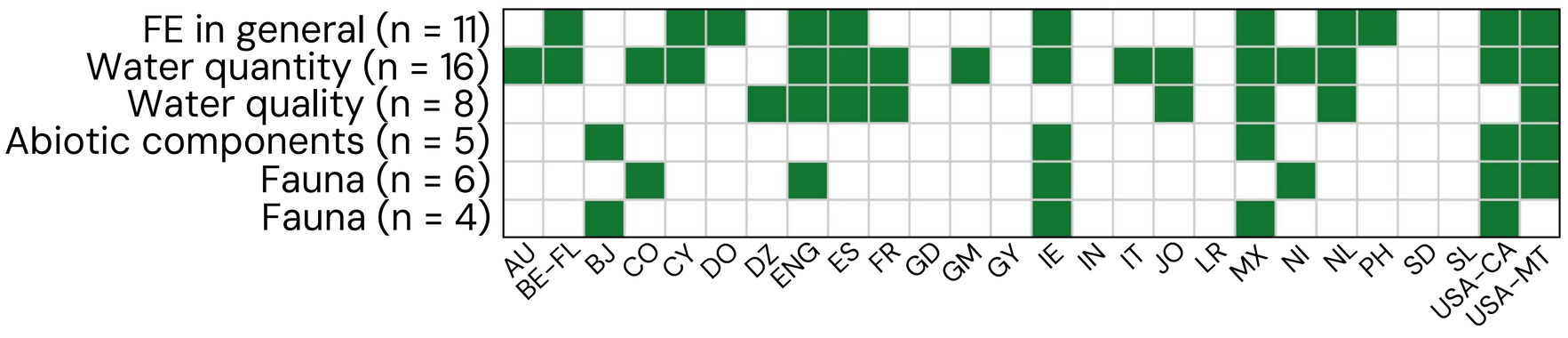
SCAN ME

RESULTS

Case study distribution and administrative level of analysis



Consideration of measures related to FE in the reviewed drought management instruments classified by addressed ecosystem component.



Environmental water strategies implemented during droughts	Case study
Safeguarding minimum environmental flow regimes	USA-MT, ENG
Decreasing minimum environmental flow regimes with certain exceptions	CY, FR, MX, SP, NL, IT, BE-FL
Modifying other flow magnitude components and attributes besides minimum flow components	AU
Other specific operations	FR, IR, NL

KEY POLICY MESSAGES

- Drought management instruments are water-quantity centred. **Effects on groundwater, water quality and aquatic habitats** should be more explicitly considered when addressing drought impacts on freshwater ecosystems.
- **Analytical methodologies** to systematically assess the drought **exposure and vulnerability of freshwater ecosystems** should be implemented to advance towards risk-based approaches.
- Recognize the **human influence** when understanding and addressing drought **impacts on freshwater ecosystems**, as well as the influence of **drought duration, frequency and timing** on the severity of drought on freshwater ecosystems.

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