4.27 Trend in piezometric levels (TPL)

Project Name: NAIAD (Grant Agreement no. 730497)

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Trend in piezometric levels (TPL)	**Water management Natural and Climate Hazards**
Description and justification	Provides an indication of the capacity of available surface water resources to meet the water demands.
Definition	Difference between surface water supply and demand (m^3/year)
Strengths and weaknesses	
Measurement procedure and tool	Modelling through Medina del Campo surface water allocation model.
Scale of measurement	Groundwater Body scale (Medina del Campo Groundwater Body)
Data source: climatic data from local meteorological stations.	
Required data	Climatic data including rainfall, runoff, evapotranspiration, infiltration.
Data input type	Historical data series
Data collection frequency	Annual
Level of expertise required	
Synergies with other indicators	Groundwater availability due to the surface-groundwater connections
Connection with SDGs	SDG 6

Opportunities for participatory data collection	
Additional information	
References	NAIAD, Deliverable D6.2, From hazard to risk: models for the DEMOs. Part 1: Spain– Medina del Campo. SC5-09-2016 Operationalising insurance value of ecosystems. Grant Agreement nº 730497

4.28 Groundwater exploitation index (GEI)

Project Name: NAIAD (Grant Agreement no. 730497)

Author/s and affiliations: *Beatriz Mayor[1], Laura Vay[1], Marisol Manzano[2], Virginia Robles[2], Mar García-Alcaraz[2], Javier Calatrava[3], Raffaele Giordano[4], Miguel Llorente[5], Africa de la Hera[5], Javier Heredida[5], Laura Basco[6], Marta Faneca[6], and Tiaravanni Hermawan[6], Elena Lopez-Gunn[1]*

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Groundwater Exploitation Index (GEI)	**Water management** **Natural and Climate Hazards**
Description and justification	Provides an indication of the pressure of water demand on groundwater availability and the sustainability of the abstractions regime.The GEI addresses directly the good quantity mandate of the European Water Framework Directive. The GEI can be used as a tool to support water management with different purposes both within a particular GB or AV or at River basin scale: to achieve sustainable/desirable exploitation rates; to monitor the expected evolution of available groundwater resources; to monitor the temporal and space changes of both groundwater input and groundwater abstraction; to compare the situation in a set of GB/AV; to provide knowledge to understand socio-economic changes linked to agrarian activities; to support environmental policies related to groundwater ecosystems and to surficial