Vulnerability and sustainability assessment currently represents one of the main challenges in order to adequately protect the precious water resources which are devoted to human consumption. Water companies pay particular attention to the quality and quantity of the used waters. In the past few years studies were realized in order to understand the whole hydrogeological context of an area, which is also pushed by global warming and the consequent climate changes. All the stakeholders are focused on the knowledge, monitoring, and protection of the groundwaters and on the identification of safeguard areas in order to avoid water scarcity and pollution events—especially in drinking water resources. The aim of the Special Issue is to define the state of the art of the studies focused on the vulnerability and sustainability assessment of both porous and karst aquifers. Special attention will be dedicated to cross-border groundwater bodies. The Special Issue aims to collect the most advanced research on karst and porous groundwaters, including consideration of the changes to our life practices that the global warming will require in the near future.