This WP involves the analysis of the impacts of the climate, land use and demographic scenarios on river catchment processes, primarily water quality and quantity. Based on this analysis the impacts of all these changes will be assessed on selected Societal Benefit Areas in the present and the future. The emphasis will be on impacts on ecosystems, biodiversity, agriculture, health and energy sectors.

WP5 methodologies will be grounded in integrated environmental assessment (IEA) and the analysis of impacts in the context of the Driving force-Pressure-State-Impact-Response (DPSIR) framework, as applied in UNEP's GEO-4 report (UNEP 2007) at the global scale and as subsequently translated into sub-global applications. In order to ensure the analysis reflects policy priorities and stakeholder perspectives, participatory methods in the form of stakeholder dialogues will be embedded throughout the process, from the identification of major impact areas to the mapping of impact pathways. Analysis of projected vulnerability will be synthesized based on the relevant results of WP3 and 4, including projected impacts through the analysis of thematic scenarios.

A key goal of WP5 is to build a solid analytic foundation for the identification of adaptation options at multiple scales, which will firmly connect the project to actual users of the information where real life positive impacts can be realized. Adaptation options will be developed at thematic, place based and at higher region-wide levels. The development of policy and management responses will build on the adaptive management and resilience school of thought. While it will respond to the challenges arising from climate change, it will go beyond that and reflect a more synthetic reality where impacts and adaptive responses emerge in the context of a wider range of interacting forces of local and global change that includes, but that is not limited to climate change (Leichenko and O'Brien 2006).