

## WorkBlock 6: Assessing the Vulnerability of Global Water Resources

### Major Milestones for the full project duration



Work package	Milestone	Date* month	Description	Relevance to policy makers
WP6.1	M6.1-1	3	First workshop to initiate the inter comparison of global scale surface water (hydrology ) models	This workshop lead to successful discussions on model comparisons and runs in conjunction with GWSP (global water systems project)
WP6.4	M6.4-1	8	All test river basins established their methodological, data and research operational issue with their respective counterparts from relevant Work Blocks.	A number of test basins and cases from across Europe will be used to analyse and demonstrate methodologies to use the consolidated tool (M6.1), this requires coordination between working groups. The 5 selected test basins all differ in current climatic and hydro-geological features and expected climate changes.
WP6.1	M6.1-2	12	component models from both inside and outside WATCH analysed	Identify those models to be combined into a new modelling framework. The new framework will consolidate rather than supersede existing modelling concepts.
WP6.1	M6.1-3	18	Preliminary plan for including surface water (hydrology) models in modelling framework	
WP6.3	M6.3-1	18	Literature overview of handling the propagation of uncertainty through modelling systems and frameworks will be prepared.	A review of the work conducted in the area of analysing the ambiguity of model outputs, will be carried out.
WP6.2	M6.2-1	20	Calibration and validation protocol completed, including a catalogue of consolidated data to be used for calibration/validation	Before using the modelling framework to conduct forecasting, comprehensive validation and calibration work will be carried out using hydrological observational and socio-economic data.
WP6.1	M6.1-4	24	Groundwater availability modules ready	Improvement of the components of the modelling framework to identify ground water availability, and water quality indices.
WP6.1	M6.1-5	36	Water quality modules ready	
WP6.2	M6.2-2	24	First draft report of flood risk assessment during the 20 <sup>th</sup> century	Evaluation of the water resources for the 20 <sup>th</sup> century.
WP6.2	M6.2-3	30	Calibration and verification of modelling framework complete for 20 <sup>th</sup> C	Before using the modelling framework to conduct forecasting, comprehensive validation and calibration work will be carried out for the past (20 <sup>th</sup> ) century.
WP6.2	M6.2-4	30	Sensitivity of 20 <sup>th</sup> C floods to	Calibrated parts of the modelling

\* Project started 02/2007 all months are counted from this starting date

Work package	Milestone	Date* month	Description	Relevance to policy makers
			drivers complete	framework will be used to analyse relative importance of anthropogenic and climate drivers on flood events and water resources over the past century.
WP6.2	M6.2-5	36	Sensitivity of 20 <sup>th</sup> C water resources to drivers complete	
WP6.3	M6.3-2	30	Scenarios available	A consolidation of scenario estimates for future periods (2020, 2050, 2100) for global coverage will be prepared
WP6.4	M6.4-2	30	Preliminary water assessment reports available fore all five test river basins	Initial report on water resource applications for the 5 test basins in Spain, Crete, Slovakia, Norway and Czech Republic.
WP6.3	M6.3-3	38	Assessment of vulnerability of agricultural sector available	Agriculture, especially irrigation, accounts for high water use, how vulnerable this sector is to changes in water availability will be analysed
WP6.1	M6.1.6	40	Common framework for global hydrological models operational	The quantitative framework will be a vehicle for consolidating existing modelling tools and databases.
WP6.3	M6.3-4	40	Assessment of vulnerability of ecosystems and utilities available	Assess consequences of changing water availability (including water quality) on ecosystems.
WP6.4	M6.4-3	40	Results of test river basins available	Final results of the impact of changing water resources on the 5 test basins.
WP6.3	M6.3-5	44	Assessment of impact of climate extremes on water resources available	Consequences of changing water availability for drinking water, industry and (hydro) energy. This assessment will combine information on population trends and water requirements by utilities with projections of per-capita consumption across a range of national, rural and urban environments.