

Project basic information		Result evaluation and assessment		Stage of development		Support to water and ecosystem management		Support to renewable energy (focus on hydropower) management		Support to harmonize water/ecosystem and hydropower management		Support to better stakeholder involvement		Support to decision making		Additional comments or clarifications by partners		
Name, web page	Type (tools, guidelines, methods, ...)	Title/Name	Short description	Final version elaborated	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	
<b>AlpWaterScan - Water Management Strategies against Water Scarcity in the Alps</b>	Outcomes and recommendations	Water Management in a Changing Environment (Strategies against Water Scarcity in the Alps) Project Outcomes and Recommendations	This is a common comprehensive report, which summarizes the AlpWaterScan outputs (developed early warning systems adapted to the challenges at the local level) and recommendations for the Alpine Convention in the field of modelling and determination of ecological flow.	Final version elaborated	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	Main objective of this project is to promote and apply Water Management strategies against Water Scarcity in the Alps and to prepare a series of recommendations for the Alpine Convention.	
<a href="http://www.alpconvention.eu/projects/detail/Alp-Water-Scan/2016/06/01">http://www.alpconvention.eu/projects/detail/Alp-Water-Scan/2016/06/01</a>	Recommendations	Water Resources Management and Water Scarcity in the Alps Recommendations for Water Resources Managers and Policy-makers	Recommendations for Water Resources Managers and Policy-makers to preserve the water resources of the Alps for future generations, to meet increasing water demand and to cope with climate change induced stress on those resources.	Final version elaborated	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	Long-term partnerships should be established with experts (including public and private consultants). Data sharing and integration should be promoted (across different sectors, regions, etc.)	
	Guideline	Monitoring and Modelling of Mountain Water Resources - A short guideline based on the results of AlpWaterScan	The aim is to list the main questions that should be addressed when undertaking both the monitoring and the modelling of the water resources of an Alpine region for the purposes of sustainable water scarcity management. These questions are not fully answered in this booklet; however, complementary references are provided in the text.	Final version elaborated	Indirectly	Indirectly	Indirectly	Indirectly	Indirectly	Indirectly	Indirectly	Indirectly	Indirectly	Indirectly	Indirectly	Indirectly	It is hoped that some of the practices applied in AlpWaterScan may contribute to the definition of a network of transnational pilot platforms and better support to the decision making.	
	Guideline	A climate scenario guideline	Two future time-windows (highly probable case and severe case) that may occur are discussed for two future time windows 2050-2060 and 2080-2099, with description how could meteorological forces evolve in these two warmer climate conditions.	Final version elaborated	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO		
	Report	Generalisation of drought effects on ecosystem goods and services over the Alps provided for AlpWaterScan WP7 "Optimal Ecological Discharge"	The report summarizes the most probable consequences of droughts for ecosystem services with a focus on the Alps. The report concentrates on some of the most relevant ecosystem goods and services as agricultural production, forestry, water resources and tourism. For each group of service, a discussion of drought effects worldwide, in Europe and in the Alps is presented. In addition, an overview of some adaptation options is given.	Final version elaborated	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	Establishment of an integrative and proactive adaptive water resource management on a regional scale. Ensuring and strengthening of cross-sectoral cooperation and management of water resources on a catchment scale beyond administrative borders.	
	Report	Summary of the Stakeholder survey	A stakeholder survey was performed to collect information on the perception of water scarcity (main problems, solutions).	Final version elaborated	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	The actions were just a stakeholder survey on water scarcity issues.	
	Informatic simulation model/platform	Development of Early Warning System Arty Catchment (Waite Savoie, France)	The main aim of establishing this early warning system was to improve long-term water reconcentration. The focus was a pilot model development and calibration. In order to improve the model, the main hydro-meteorological parameters in 9 sub-pine catchments of the Piave River. This early warning system is a multi-criteria method for both, short-term management and long-term planning.	Preliminary version established	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	The system is established to support decision making where also stakeholder are supported with proper information on water availability.	
	Informatic simulation model/platform	Early Warning System for Drinking Water Supply (Province of Carinthia, Austria)	The early warning system is dedicated to ensuring a sustainable drinking water supply. It can be separated into two parts: 1) a scenario catalogue for drought and water scarcity conditions; 2) an estimation tool for drinking water resources.	Preliminary version established	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	The results of the early warning system support the communities and water suppliers to take the necessary actions and decision on time. The decision making is also based on stakeholders.	
	Informatic simulation model/platform	Early Warning System for the Piave Catchment (Province of Veneto, Italy)	The related purpose lies to prevent water conflicts between hydropower generation and agricultural use. The early warning system for water scarcity uses a methodology consisting of the analysis of the main hydro-meteorological parameters in 9 sub-pine catchments of the Piave River. This early warning system is a multi-criteria method focusing on a statistical analysis that considers the last 25 hydrological years as a reference period. The "Water Scarcity Index" (WSI) is estimated by comparing the current situation to the past hydrological statistics.	Established	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	There is a lack of documentation support (theoretical, technical, algorithms, geographic information). Web page with pilot case areas and connection to the early warning system and their documentation should be available.	
	Informatic simulation model/platform	Optimizing Irrigation - an Early Warning System for Agriculture in Slovenia	The system contributes to water-saving measures for agriculture. In order to optimize the amount of water used for irrigation, a short-term early warning system for agriculture was developed for the Pilot sites of Drosnik polje and Trupško polje in Slovenia. This early warning system was based on the forecast of the quantity of water and the timing of its application to various crops using the IRRIB (Irrigation Forecast Model in Slovenia).	Established	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	The results of the early warning system improves management and decision making. With results interpretation stakeholders awareness and communication is improved.	
<b>ICECONNECT - Improving Ecological Connectivity in the Alps</b>	Tool	Joint Ecological Continuum Analyzing and Mapping Initiative (JECAMI)	This online mapping tool was developed to support decision-making processes concerning ecological connectivity on the local, regional and Alpine level. The JECAMI web service is a GIS platform and consists of four parts: the Continuum Suitability Index (CSI), which is a combined analysis of structural landscape connectivity and landscape permeability; the Species Mapping Application (SMA) - an analysis tool to detect barriers and corridors between two spatially separated locations for one of the umbrella species (on an Alpine scale); Priority Areas Mapping (PAM) - visualising different area types, e.g. with high biodiversity or extensive agricultural area; and the Connectivity Analysis of Invertebrate Networks (CAN) - to identify barriers in all four dimensions of the rivers within the pilot regions, where habitats of water-related flora and fauna should be shown in the maps, the outcomes should show how a certain area is impacted by humans (barrier effects and fragmentation). JECAMI is a system based on Google Maps® where .kmz-files can be uploaded to calculate the connectivity and to identify barriers within the seven "pilot regions". The purpose of the results is to be used as an input for decision makers (e.g. distribution areas of certain species, with actual barriers shown).	Not finished	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	Generally, the idea behind JECAMI is quite nice, it would be great if all the promoted tools would be finished in the near future. The services are still under construction and can only be seen as prototypes so far. The web tool can still not be used and has a restricted scope. The reason for that is a lack of data and a problem to find further funding to finish it. Many stakeholders do not know if JECAMI yet. Moreover, stakeholders and tool users do not know what happens to their uploaded data - i.e. if they are stored somewhere etc.	
<a href="http://www.iceconnect.eu/">http://www.iceconnect.eu/</a>	Final Report/Booklet	Alpine biodiversity needs ecological connectivity	The report summarizes the results from the ICECONNECT project. Major project results can be summarized as follows: • Geographic data across the Alps were collected and harmonized with a novel and innovative tool: the ecological connectivity in the Alpine range and within the seven Pilot regions was assessed based on a common approach. • Six umbrella species were selected and their potential movements in the Alpine landscape were modelled based on their habitat requirements. • The first comprehensive study on legal barriers to connectivity in the Alps was carried out and related solutions were identified. • The most relevant barriers and corridors at the Alpine and the regional levels were identified, a number of concrete measures aiming at enhancing connectivity within and beyond the cross-border Pilot regions of the project were implemented. • Knowledge concerning ecological connectivity, the key stakeholders and the general public was improved.	Final version elaborated	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	The project results were not only published in a long and complex report but also in short summary documents, i.e. policy recommendations, implementation recommendations and synopses. Moreover, the project outcomes, policy recommendations and implementation recommendations were translated into the most important national languages of the Alpine space besides English: German, French, Italian and Slovenian.	
	Recommendation	Implementation recommendation	1) Protected area administrations are starting points for the development of successful governance models of connectivity at regional level due to their interdisciplinary competences and know-how. 2) The JECAMI tool enables the pilot regions to identify their role and the potential for connectivity in the Alps also at regional level. 3) ICECONNECT identifies the landscape approach as a basis for ecological connectivity. Species serve as indicators for landscape functions and support detailed analysis steps as well as the evaluation of measures at local level. Additionally, they are valuable for communication purposes. 4) Embedded in an Alpine-wide context and common methodological approach, all actors at the pilot region level contribute, to get a clear picture on the existing framework conditions for connectivity in order to find adequate solutions for its specific regional context. 5) Pro-active efforts to analyse and counteract risks for biodiversity and connectivity must be tackled by joining forces with other relevant sectors - the instruments are territorial and include, in particular, spatial planning. 6) The existing national rules and regulations concerning connectivity need to be carefully analysed. Their potential for enhancing connectivity must be discussed and proposals have to be made as to necessary improvements and modifications.	Final version elaborated	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	NO	In the face of marked global anthropogenic change and applying the precautionary principle, policy makers are urged to initiate wide-reaching decision-making processes and implement any needed policy changes on a legal/institutional level to sustain desired ecosystem states and transform degraded ecosystems into fundamentally new and more desirable configurations.
	Recommendation	Policy recommendation	1) Ecological connectivity has to be valorized as an irreplaceable element for biodiversity, ecosystem services with consideration of social and economic aspects. 2) The legal framework in support of ecological connectivity measures at various scales has to be established, supplemented and improved. 3) Ecological connectivity has to be included in spatial planning instruments at all levels (from the local to the international level), using multi-sectoral approaches. 4) Protected area managers should be supported and empowered by the administrative authority to take an active role in the process to implement a local and regional ecological network both within and outside protected area boundaries. 5) Publicly funded data and analyses have to be made openly available through a harmonized centralized data management platform.	Final version elaborated	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	NO	The legal framework in support of ecological connectivity measures at various scales has to be established, supplemented and improved. Ecological connectivity has to be included in spatial planning instruments at all levels (from the local to the international level), using multi-sectoral approaches. Publicly funded data and analyses have to be made openly available through a harmonized centralized data management platform.
<b>SHABE - Sustainable Hydropower in Alpine Rivers Ecosystems</b>	Handbook	A problem solving approach for sustainable management of hydropower and river ecosystems in the Alps	The report is a brief highlighted overview conceived as a tool to support sustainable river and hydropower management undertaken by local administration, public and private consultants and other river stakeholders. The intention is to guide the reader in a simple way through the SHABE methodological approach and the different tools and resources developed and tested during the SHABE cooperation period.	Final version elaborated	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	NO	It provides a framework for better decision making.
<a href="http://www.shabe-alpine.eu/">http://www.shabe-alpine.eu/</a>	Software	SHABE SHABE system is a stand-alone software application, which implements the classic multi-criteria analysis (MCA). This system is divided into several sections and may be used to assist the decision makers in the problem definition process, in the criteria analysis, in the final selection, in the utility function and criteria weights assignment, and so on.	SHABE - SHABE Project Customized Version: This software assumes that one is already familiar with this type of methodology and general concepts related to decision-making processes. There are 7 phases in the MCA: organization of criteria in a decision tree; filling the evaluation matrix with alternatives; determination of performance and normalized utility functions to perform evaluate/score the alternatives for selected criteria; application of utility functions; final ranking; sensitivity analysis. The program deals with the MCA and allows the user to manipulate all the objects of the MCA itself in a graphical way, including e.g. criteria and alternatives, utility functions or weights. Therefore, all phases of a decisional process are represented by specific panels. This software allows one to derive the final ranking of alternatives and to analyze the composition of results. The SHABE program operates on projects. A project is an independent entity that contains all the data and structures that are related to the description of a decision-making process applied to a specific problem. Each project is stored in a single file that can reside anywhere on the hard disk of the user's machine. Within the program, projects are managed through a multiple document interface, in which each project is opened and maintained in a dedicated window.	Final version elaborated	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	NO	It provides a framework for better stakeholder involvement.
	Software	CASIMR	Customized software to assess habitat conditions along the river channel and bank areas with a specific module for the evaluation of economic effects for hydropower production (www.casimr-software.de). The CASIMR Model Concept for riverine ecosystems and their habitats is inherently complex and contains a large number of relationships between biotic and abiotic components. Habitat models can be an appropriate instrument for studying ecological functions of these systems. They allow for the qualitative assessment of habitat conditions for species that are under consideration, most commonly for indicator species such as fish. Since the late 1990s, the University of Stuttgart has pioneered the development of fuzzy logic based habitat simulation software, resulting in the creation of the CASIMR software suite: Fish, benthos, and Hydropower.	Final version elaborated	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	NO	CASIMR software are available online & free for noncommercial use.
	Software	VAPORO ASTE	A GIS tool to evaluate the hydropower residual potential in a watershed, taking into account its catchment, the actual withdrawals and restitution schemes as well as the application of the Minimum Instream Flow constraints. VAPORO-ASTE calculates the river network and belonging catchment areas automatically. The user chooses a river branch where to calculate the potential hydropower production, which is extended on equal segments and corresponding sub-basins are generated. A series of channel sub-basins are generated by the model. The tool is able to guide the user to identify the best hydropower configuration, maximizing the energy and minimizing investment costs. The tool is developed based on a DEM model (Digital Elevation Model), addressed mainly to support decision makers and stakeholders for the evaluation of potential sites addressed to the SHP implementation in the territory. The new version is able to work with 13 structural lengths for a more accurate hydro-plant optimization and has the ability to use automatic satellite photo maps as background during the GIS representation of results and optimized exploitation schemes.	Final version elaborated	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	Support to public organisations and investors to recognize the watercourses or their sections with higher and economically feasible potential.
	Report	River Functionality Index report	The report describes the RFI Index (River Functionality Index) and the two main sub-indices, which can be derived by extracting sets of questions from the main RFI questionnaire. The questionnaire component is of particular importance, even if the method evaluates the whole river ecosystem.	Not available on the web page	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	NO	Focus on hydrological and economic issues, from the point of view of aquatic ecosystem conservation only. Environmental flow is considered other ecological parameters are neglected.
<b>Recharge Green - Reconciling Renewable Energy Production and Nature in the Alps</b>	Method/model	Decision Support System (DSS) for renewable energy deployment	This system (online tool) will consider economic and ecological trade-offs. The partners will mainly use the geographically explicit "ReWhere model", developed by the partner IASA, and the Italian tool "BIOMASFOR" to optimize size and geographic distribution of biomass production plants. Hydro-, wind and solar potentials will be integrated into the model as well. Designing the DSS is the main task within Work Package 5, "Economic dimension of renewable energy". To explore economic and ecological trade-offs, the partners will develop and apply a new concept, termed the "Marginal Protection Cost Curve". They will use the rankings of e.g. biodiversity hotspots to progressively exclude areas of concern. In an area with a higher level of protection, the per unit costs for achieving energy production from renewables will be relatively higher than in a less protected area. This information feeds into the DSS. Decision makers can use this tool online for help in forming plans according to their preferences. The DSS tool will be integrated into an already existing map-based survey tool on biodiversity and ecological connectivity, JECAMI, which was developed in the now completed Alpine space project ICECONNECT. The partners plan to apply the DSS in the pilot areas on a case-by-case basis, when sufficient data are available.	Under development	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	NO	Under elaboration. For the study cases dealing with hydropower.
<a href="http://www.recharge-green.eu/">http://www.recharge-green.eu/</a>	Upgrade of existing model and application in DSS	"ReWhere" - existing map-based survey tool on biodiversity and ecological connectivity	Online mapping tool developed to support decision-making processes concerning ecological connectivity on local, national and regional Alpine levels.	Under development	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	NO	Under elaboration. For the study cases dealing with hydropower.
	Application of the model in DSS	"ReWhere" - determination of optimal spatial distribution and size of biomass polyproduction plants	Bioregion model - ReWhere - which determines the optimal spatial distribution and size of biomass polyproduction plants given the locations of biomass supply, actual biomass based industries and energy demand. The economy of the supply chain is calculated with regard to the economy of scale of the biomass production plants.	Under development	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	Under elaboration.
	Application of the model in DSS	"BIOMASFOR" - size and geographic distribution optimization of biomass production plants	An open-source spatial analysis model to quantify the availability of forest wood energy biomass in terms of ecological and economic sustainability. Application of multi-functionality parameters for evaluation of the potential impact of biomass extraction on different forest functions. The multi-step approach and the model's internal structure permits the use of the model with highly differentiated input datasets. The individual model biomass demand evaluation shows the impact of the wood-energy supply/demand.	Under development	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	Under elaboration.
<b>SEAPAs - Supporting local authorities in the implementation of Sustainable Energy Action Plans in the Alpine Space Area</b>	Methodology	Action Plans for Public Investment (APPI)	The "SEAP ALPS" project aims to develop and share a methodology for the development of the "Investment Plans for energy efficiency in public buildings" at the municipal level. It will address the following aspects: 1. The definition of a set of indices useful for categorizing the municipality-owned public structures based on their energy performance and total consumption. 2. Drafting a guide on how to calculate the proposed indices, gain the data and keep the monitoring system updated. 3. Defining a method for prioritizing intervention priorities in accordance with the requirements mentioned in the Energy Efficiency Directive (2012/27/EU Directive) and the timeframes in which these interventions must be planned. 4. Ways in which it will be possible to assess necessary economic resources for their implementation and to identify the parameters for discovering the best ways to guarantee financing, drawing from public and private resources according to the size and type of the investments.	Available on the website (draft 2)	Indirectly (1)	Indirectly (1)	Indirectly (1)	Indirectly (1)	Indirectly (1)	Indirectly (1)	Indirectly (1)	Indirectly (1)	Indirectly (1)	Indirectly (1)	Indirectly (1)	Indirectly (1)	NO	The methodology is addressed to local public administration to support them in the classification of the buildings according to an energy performance index based on primary energy consumption, identifying the various possible energy efficiency interventions, attributing an intervention priority to every building. The methodology define a decision-making process.
<a href="http://www.seap-alps.eu/">www.seap-alps.eu</a>	Tool (on-line platform)	SEAP_ALPS Action Tools	The Action Tool provides help for the following issues: 1) Select projects that help reducing the energy consumption of a municipality and foster the use of renewable energy. Suitable adaptation measures also need to be included in the task list. The projects or campaigns should be focused on all target groups and should include citizens as well as companies, etc. 2) For each project or campaign, a short description is provided, listing responsibilities, costs, envisioned energy savings, relevant actors and target groups and CO2 emission reductions (as far as possible).	Available on the website	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	NO	SEAP Action Tool comprise nine fields of action (e.g. municipal buildings or transport or local electricity production). The field "local electricity production" includes the following topics: GS.1 hydroelectric power (GS.1.1 renovating existing plants, GS.1.2 planning, GS.1.3 storage, GS.1.4 adaptation) GS.2 wind power GS.3 photovoltaics GS.4 biomass power plant GS.5 heat power cogeneration GS.6 smart grids For each project provide a informative sheet with a description and a classification of CO2-saving potential, estimated costs for municipality, cost/benefit ratio, target groups and references
	Training Platform for Local Authorities	Training Platform for Local Authorities	The SEAPAs Training Platform provides detailed information about the following topics: • Development of a Sustainable Energy Action Plan, according to the Covenant of Mayors. • Development of a Climate Change Adaptation Plan. • SEAPAs methodology. Subject to the training, the user can re-examine her/his knowledge with a test. After having completed the questionnaire, the results are obtained immediately.	Available on the website	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	Article 4 of the 2012/27/EU European Directive dictates that the Member States must create a strategy for unleashing investments in energy rehabilitation for private and public buildings. Article 5 of the same directive obliges the buildings of the central government to enforce energy requirements in 3% of the total building property (greater than 500 m <sup>2</sup> ) with the aim of bringing energy performance back to the legal values dictated by the 2010/31/EU European Directive, which has restricted the 2009/125/EC Directive. It also includes as a criterion that priority should be given to the buildings which have the poorest energy performance.

SedAlp - sediment management in Alpine basins: Integrating sediment continuity, risk mitigation and hydropower	Reports	Technical monography, policy recommendations and management recommendations on sustainable sediment management.	Technical monograph on sustainable sediment management in Alpine rivers. Policy recommendations on sediment management to support River Basin Management Plans. Recommendations on good governance on sediment-related issues across the Alpine Space.	In progress	Indirectly	Support to improved sediment management with consideration of aquatic ecosystems conservation.	YES	Regards to solve sediment load problems related to the hydropower reservoirs	YES	Promotion of the enhancement of river ecosystems reducing the impacts of hydropower plants (balancing the implementation of EU Directives e.g. NIS, Floods and WFD).	YES	Consideration of active stakeholder involvement for better sediment management.	YES	Strategy policy development and implementation actions for the improvement of sediment continuity in Alpine river basins to support decision making.	Conflict between WFD and Flood Directive resolving. Transparent implementation. Case studies.
<a href="http://www.sedalp.eu/">http://www.sedalp.eu/</a>	Guidelines	Guidelines for technical support for sediment management	Guidelines for estimation of sediment and wood budgets in different hydro-climatic and geological settings. - Guidelines for determining scenarios to be used for flood risk mitigation. - Guidelines for the identification of morphological impacts related to existing and new hydropower plants and gravel extraction. - Improved concepts of responses of torrent/river control structures to floods and debris flow impacts (including wood). - Guidelines for planning/designing of efficient torrent control structures with low impact on sediment continuity between upstream torrential headwaters and downstream river reaches. - Guidelines for improved planning of hydropower plants aimed to improve the longitudinal sediment continuity between upstream torrential headwaters and downstream river reaches. - Guidelines for planning and designing of effective flood protection systems, river training and restoration projects that have lower impact on sediment continuity. - One report on guidelines for ranking basins and channel reaches in terms of geomorphic activity and hazard potential, including identification of critical stream sections.	In progress	NO		NO		YES	Identification of morphological impacts related to existing and new hydropower plants	NO		NO		
Responsible partners: IZRS, RSE	Methods & Guidelines	Methods and guidelines for design and risk management		In progress	YES	Support to improved sediment management with consideration of aquatic ecosystems conservation.	YES	Support to sediment management with regards to efficient hydropower planning.	NO		NO		NO		
	Database & methods	Guidelines and methods for data collection and analysis	- Dataset on sediment and wood transport rates and volumes for different regions in the Alps (Study areas). Four georeferenced databases of sediment sources will be prepared. - Protocols on standardized data collection methods in sediment transport monitoring for transboundary exchange. - Improved process understanding of spatio-temporal variability in sediment transport. - Improved equations and models for predicting sediment and wood transport rates. - Evaluation of restoration projects with respect to suspended sediment fluxes.	In progress	NO		NO		NO		NO		NO		
	GIS tools & models	GIS tools and models	- One GIS-based Fluxal Information System for detecting sediment availability/transfer and for characterizing channel reach response potential with one manual for stakeholders. - One conceptual soil erosion model that can be used for the description of long term variations in suspended sediment yields.	In progress	NO		NO		NO		YES	Elaboration of manuals for stakeholders.	NO		