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**Environmental Protection of  
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## **Project Activity 1.3.2**

# **Concept of Training Course on WFD Approach towards Hydromorphological Quality Element Assessment**



## 1. Objectives and background information

This activity will contribute to the implementation of the Activity 1.3: ‘Development WFD-compliant monitoring programmes including hydrobiological, physico-chemical and hydromorphological elements and groundwater’ and Activity 1.4: ‘Assist in the development of WFD-compliant tools for assessing data obtained from monitoring activities (ecological, chemical, hydromorphological classifications)’.

Main objective of these tasks will be increasing capacities of the respective national authorities for biological and chemical monitoring also addressing hydromorphological and physico-chemical elements as required by the EU WFD.

This specific training programme on monitoring and assessment of water status focuses on hydromorphological alterations in the rivers and testing **the Guidance document addressing hydromorphology and physico-chemistry for a Pressure-Impact Analysis/Risk Assessment according to the EU WFD developed by the EU EPIRB project**. Therefore, the following objectives are identified for the training course on hydromorphology:

1. **Hydromorphological pressures and impacts – policies integration**, the interactions between water policy and other policies (energy, irrigation, agriculture and flood management) – slide presentation.
2. **Morphological classification applying relevant quality elements** for river WBs will be done in slide presentation and also during the field training.
3. **Overall classification of Hydromorphological Quality Elements, according to five classes as foreseen by the Guidance standard for assessing the hydromorphological features of rivers (EN 14614:2004) and Guidance standard on determining the degree of modification of river hydromorphology (EN 15843:2010).**
4. **Training on the use of the Guidance document addressing hydromorphology and physico-chemistry for a Pressure-Impact Analysis/Risk Assessment according to the EU WFD will be conducted (two steps will be conducted). The Alazani river basin was selected to test the Guidance document.**
5. **Outline of hydromorphological mitigation measures in relation to water uses, pressures and impacts.**

## 2. Training course timeline, locations and institutional arrangement

Training course will be provided for Caucasus in Telavi, Georgia, on 3-4 July 2014 and for Eastern European countries in Chisinau, Republic of Moldova, on 3-4 September 2014.

This course is organized for the beneficiary institutes that are responsible for the WFD-compliance hydromorphological monitoring programme design and assessment of the hydromorphological quality elements as following:

- Armenia – State Hydrometeorology Service of the Ministry of Emergency Situations of Armenia (MES); and Environmental Impact Monitoring Center (EIMC) of the Ministry of Nature Protection of Armenia (MNP)
- Azerbaijan – National Hydrometeorology and Monitoring Departments of the Ministry of Ecology and Natural Resources of Azerbaijan (MENR);
- Georgia – National Environment Agency of the Ministry of Environment and Natural Resources Protection of Georgia (MENRP);

- Republic of Moldova – State Hydrometeorology Service of the Ministry of Environment of the Republic of Moldova
- Ukraine – National Hydrometeorology Service of the Ministry of Ecology and Natural Resources of Ukraine;
- Belarus – State Hydrometeorology Service of the Ministry of Natural Resources and Environmental Protection of Belarus.

It is expected that 3 national experts, including i) hydrologists/hydromorphologist, ii) field biologists and iii) general physico-chemical monitoring expert from Armenia, Azerbaijan and Georgia will participate in the Hydromorphology Training course.

Number of presentations on Hydromorphological Quality Element assessment (including channel morphology, river continuity and changes in the hydrological regime) and on **the Guidance document addressing hydromorphology and physico-chemistry for a Pressure-Impact Analysis/Risk Assessment according to the EU WFD**, will be done during the day-1. The second day will be dedicated to afield training at various parts of the Alazani River basin to demonstrate different hydromorphological pressures.

### 3. Training course equipment and materials

Equipment/Item	Quantity	Confirmation
<b>Projector, laptop (the national teams are required to have at least one for each), digital flow meter, GPS device</b>		
<ul style="list-style-type: none"> <li>- <b>Data from the JFS Kura in the Alazani River basin</b></li> <li>- <b>Mean annual flow and minimum flow the Alazani – Shakriani and the reference water bodies</b></li> <li>- <b>GIS maps on land use (agriculture), elevation, hydrology and water use (water abstraction sites, HPPs)</b></li> <li>- <b>Statistical data on population and agriculture activities</b></li> <li>- <b>Statistical data on water abstraction</b></li> <li>- <b>The area of river catchments (km<sup>2</sup>)</b></li> </ul>		
<b>Historical map from the Alazani River basin, if available</b>		
<b>JFS protocols</b>	20	