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## Mission Report

### KE5 Mission to Armenia, Akhurian Pilot Basin Area

**Dates: 21-25 August, 2012**

**Venues:**

Armenia:

- 1) USAID Clean Energy and Water Program
- 2) Hydro-Geology Monitoring Center, Ministry of Nature Protection;
- 3) Water Resources Management Agency, Ministry of Nature Protection;
- 4) Akhuryan Pilot Basin Area.

**Mission Participants:**

EPIRB Project Team

Mr Bernardas Paukstys, KE5-Groundwater Expert  
Mr Vahagn Tonoyan, CWM Expert for Armenia

**Participants from Armenia:**

USAID Clean Energy and Water Program

Mr. Steven Nelson, Chief of the Party  
Mr. Benyamin Zakaryan, Hydrologist  
Ms. Lilit Harutyunyan, Basin Management Specialist  
Mr. Aram Gevorgyan, GIS/Data Management Expert

Hydrogeology Monitoring Center, Ministry of Nature Protection

Mr Hovik Aghinyan, Head of Division of Water Inventory and Monitoring  
Mr Harutyun Yeremyan, Leading Specialist, Division of Water Inventory and Monitoring

Water Resources Management Agency - WRMA, Ministry of Nature Protection

Mr Volodya Narimanyan, Head of the Agency

## 1. Objective and task of the mission, and project activity/ies to which the mission will contribute

Objectives: Objective of the mission was to evaluate the level of existing groundwater information for the River Basin Analysis (RBA), discuss cooperation with the local groundwater experts, collect available information and visit the Northern Akhuryan Water Basin Management area.

Project activities: The mission will contribute to the Activity 2.1 – River Basin Analysis

## 2. Outline the programme of the mission: meetings held, assessment made, workshop provided etc.

**21.08.12**

10:00-11:00 USAID Clean Energy and Water Program  
11:30-13:00 Hydrogeology Monitoring Center  
14:00-14:30 Water Resources Management Agency

**22.08.12**

10:00-16:00 Work at the Geological Archive

**23-24.08.12**

Field visit at Northern Akhuryan Water basin area to check the groundwater abstraction wells and springs



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### 3. Results from the mission

Meetings/field visits:	Findings/results:
USAID Clean Energy and Water Program	USAID Clean Energy and Water Program will be responsible for the implementation of the project has announced a tender for local companies of Armenia for the project "Re-assessment of Volumes of Groundwater Resources in Ararat valley". The focus of the project will be: a) summarising the studies on groundwater resources in Ararat valley; b) analysis of past and current trends of groundwater use in the valley; c) assessment of recharge rates of aquifers; and d) preparation of recommendation on efficient use and protection of groundwater reserves of the valley. It is expected that the project starts in September-October 2012 and will last for 1 year. Some tasks and activities of the USAID project are similar to the work our project does therefore cooperation between the projects and exchange of information has been discussed.
Hydrogeology Monitoring Center	KE5 has prepared a list of groundwater information which is needed for the RBA. Availability of information has been discussed with the hydrogeologists from the Monitoring Center. It was found out that there is sufficient paper information to characterize groundwater aquifers and impact of human activity in the Pilot Basin. Important component of RBA are GIS maps which are not available at the moment. Preparation of GIS maps has to be organized ASAP and this issue will be discussed with the project managers.
Water Resources Management Agency	Head of the agency Mr. Volodya Narimanyan expressed his wish to organise a workshop for local water experts on delineation and monitoring of groundwater bodies. KE5 and CWM for Armenia promised to organise such a workshop at the end of 2012 or beginning of 2013 when delineation of groundwater bodies in the Akhuryan Water Basin Management area will be performed.
Geological Archive of the Hydrogeology Monitoring Center	KE5 has worked in the archive looking at the old reports which cover Pilot Akhuryan River Basin. There is a sufficient amount of paper information for characterization of groundwater aquifers, but this information has to be digitized.
Northern Akhuryan River Basin	KE5, CWM for Armenia and two specialists from the Hydrogeology Monitoring Center visited Northern Akhuryan Depression from which groundwater is provided for the supply of local villages and Gyumri Town. Self-flowing wells and captured springs of Ashotzq, Zuygaghbyur and also Arpi lake/reservoir which is the source of Akhuryan River have been visited.

### 4. Recommendation / Proposed next steps

Very important part of RBA are GIS maps which are not available in the responsible institutions of Armenia at the moment. Therefore purchase of GIS services and/or products has to be discussed with the project managers ASAP.

A workshop for local Armenian experts on delineation of groundwater bodies and groundwater monitoring can be organized when delineation activities are finished.



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**Photos**



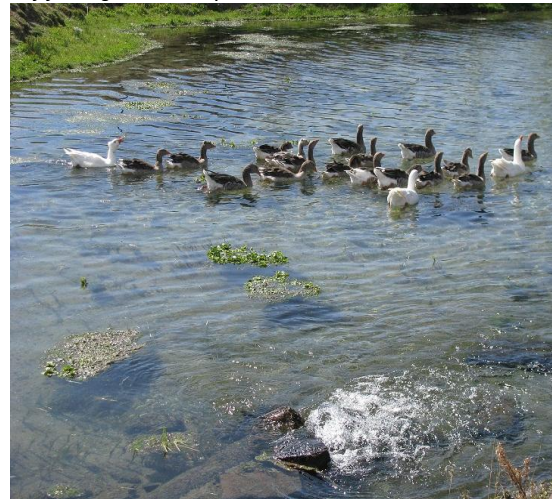
*Meeting at the Hydrogeology Monitoring Center*



*Self-flowing well near Gyumri*



*Water supply well in Ashotk Depression*



*Groundwater spring in Ashotk area*



**Environmental Protection of  
International River Basins Project**  
Contract No. 2011/279-666



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*CMW Armenia Vahagn Tonoyan (right) with local hydrogeologists near the Arpi lake-  
the source of Akhuryan river*

*Photos by Bernardas Paukstys*