

Romanian experience on Water Framework
Directive Community
Collaborative learning community for water
professionals
-Leonardo da Vinci Programme-

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National Administration "Apele Romane"

"EUROPE INBO 2006"
INTERNATIONAL CONFERENCE ON THE
IMPLEMENTATION OF THE EUROPEAN WATER
FRAMEWORK DIRECTIVE
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Collaborative learning community for water professionals

-Leonardo da Vinci Programme-

The project consists in:

- creating a Continuous Education and Training scheme for water professionals, based on collaboration between peers, working together on the implementation of the Water Framework Directive (WFD), through a Virtual Learning Community (VLC).

The Virtual Learning Community (VLC)

- helped to train the junior managers in charge of integrated water management, backing them with the experience of the **senior staff**, either as **tutors**, or as **contributors** to exchanges, thus bringing to the **young people** their knowledge and know how both formal and informal, and getting back an actualization of their own knowledge

PARTNERS IN THE PROJECT:

- **Office International de L'Eau -OIEau** is the contracting body and the technical coordinator of the project, in charge of setting up the Operational Unit of the Project, which organized, based on the expertise of the partners, the drafting of the specifications, then the experimental phase, before assessing the feasibility of the community.
- **International Network of Basin Organizations- INBO** brings the validation widened through its members and controls the diffusion and the promotion of the results.
- **HydroControl** is more particularly responsible for the assessment of results, and the dissemination of the intermediate and final results, thanks in particular to its close partnership with the network Techware ; its expert also intervened at the time of the technical exchanges and was also charged to mobilize Italian participants.

PARTNERS IN THE PROJECT:

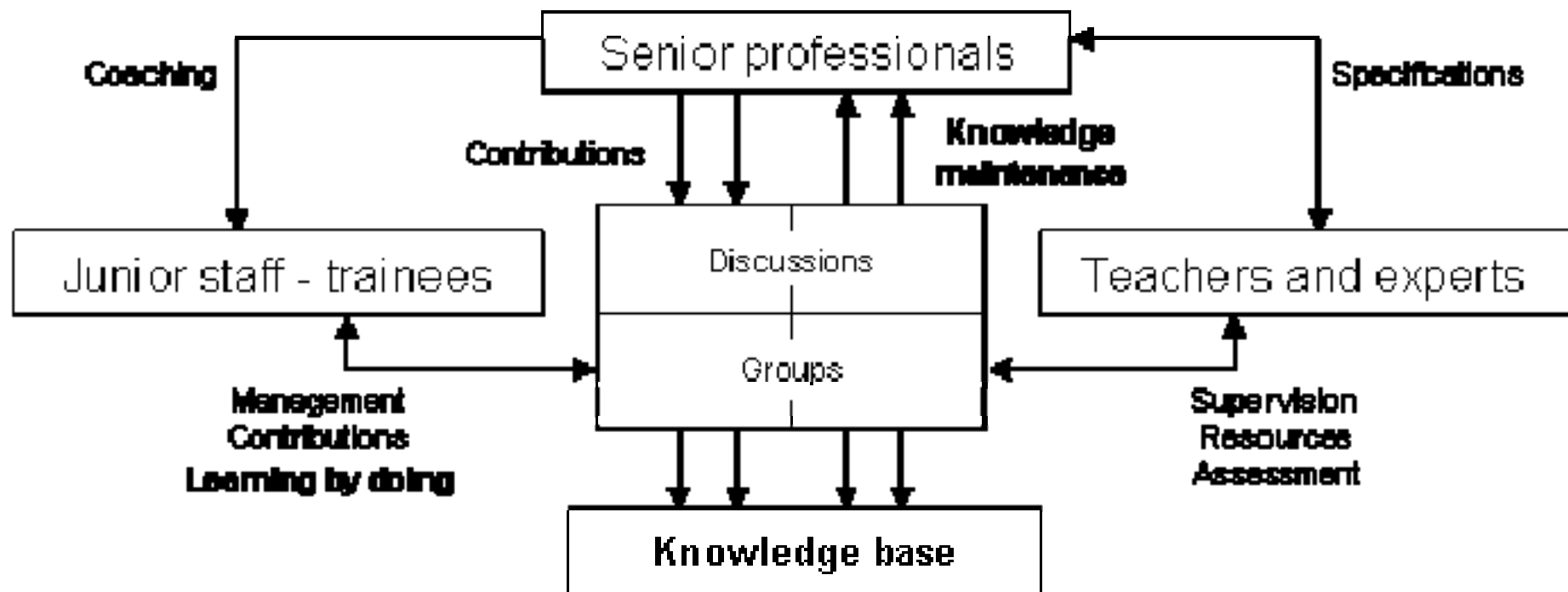
- **The Gdansk Water Foundation -GWF** takes part as an expert to feed the specifications of the system, and it took part in the mobilization of Polish executives to contribute in the experiment and to collect the data near them for the evaluation.
- **National Administration “Apele Romane”** represents the beneficiaries, and brings its expertise on the needs, its personnel to make the tests (several junior managers, a tutor and senior professionals participating in the exchanges) and to validate the operation of the community **NA Apele “Romane”** was the pilot of the experimental phase.
- **The Polytechnic University of Bucharest** was charged within the project to validate the teaching specifications, to take part in the evaluation of the experimental phase and to seek the conditions of recognition and validation of the training.

National Administration “Apele Romane” tasks

- In the frame of the project, **National Administration “Apele Romane”** together with **Polytechnic University of Bucharest** has the role to participate at the “experimental phase” for testing the concepts and programs proposed;
- Their role was to improve the virtual community functioning, in order to achieve a proper outcome which corresponds to the learning needs

COURSE IMPLEMENTATION

- The course testing was done by **20 young learners**, divided into **5 teams of 4 persons each**;
- Taking into account that the implementation of the project was done in **4 countries**, each country proposed a number of trainees: 12 from Romania (3 groups), 4 from France (1 group), 3 from Poland and 1 from Italy (1 group);
- Romanian trainees were selected applying certain criteria - young specialists which are working at the implementation of the Water Framework Directive, from the staff of Water Branches of **National Administration “Apele Romane”** (one person from each branch) and one person from **National Administration “Apele Romane”** head quarter



LEARNING PROCESS SCHEME

CONTENT OF THE TRAINING COURSE CYCLE

- Based on virtual platform on Internet (Mayetic Village) there have been elaborated and developed specific subjects on the implementation of Water Framework Directive, organized in 6+1 modules:

- **Module 0: Introduction to WFD**

- **Module A: Good status of surface waters and groundwater in 2015**

- **Module B: Characterization of surface water and assessing pressures and impact**

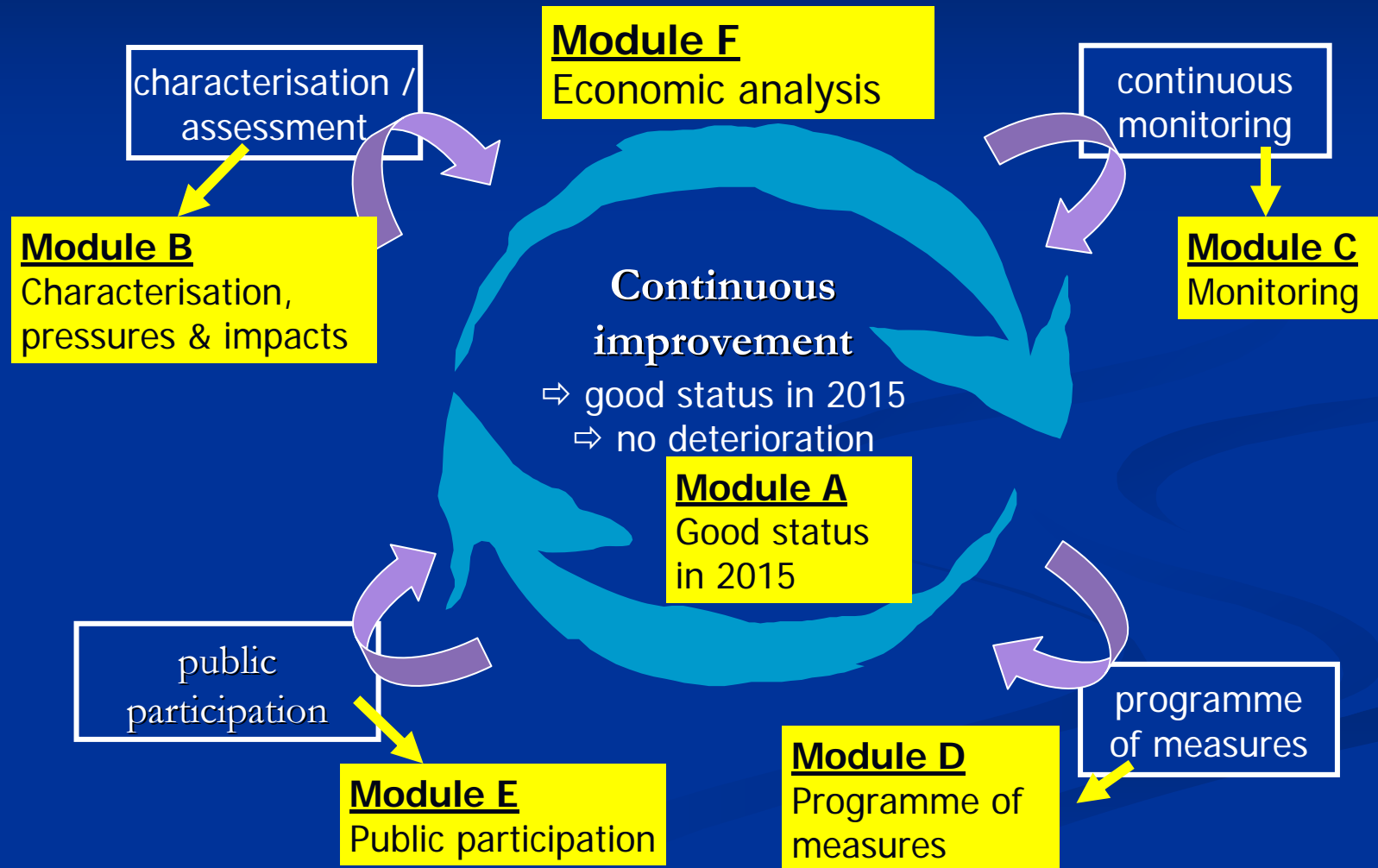
- **Module C: Monitoring programme to establish the water status**

- **Module D: Economic analyze**

- **Module E: Management plan and programmes of measures**

- **Module F: Public participation on decision making process**

WFD-Community



COURSE IMPLEMENTATION

- The 6 modules have been established by the partners in a “knowledge tree”;
- The “knowledge tree” is the descriptor of what have to be known, and what have to be assessed by trainers when taking of a certificate;
- Each module included 5 questions for the 5 Working Teams (one question for each Working Team)

Implementation of the modules

■ The learners tasks were:

- to appropriate the problem (in group)
- to collect data and to analyze the information (individual)
- to establish a general situation of the theme/problem (in group)
- to present to the other learners (in virtual classroom) their view of the theme /problem (all the class)
- to clarify and complete the presentation and the obscure points (the tutor)

COURSE IMPLEMENTATION

- Until now, the trainees covered the modules A, B, C and D:

Module A: Good status of surface waters and groundwater in 2015

Module B: Characterization of surface water and assessing pressures and impact

Module C: Monitoring programme to establish the water status

Module D: Economic analyze

- The last 2 modules E and F:

Module E: Management plan and programmes of measures

Module F: Public participation on decision making process
are going to be studied (by a voluntary base) by some of the learners.

COURSE IMPLEMENTATION

Group leading consisted in:

- distributing tasks towards the individuals to organize the exchanges, to moderate the forums, to synthesize the various contributions, to bring complementary elements to feed the exchanges (documents, testimonies, case studies...);
- to organize virtual conferences via Internet with ad hoc experts, all actions which made it possible to improve the quality of work.
- Each individual trainee was a contributor in all groups, he had to prepare inputs on sub topics, carried out monographs on the implementation of WFD in his context.
- The various contributions were capitalized to feed a base of knowledge, for further users.

COURSE IMPLEMENTATION

- In this collaborative learning community, the trainees were coached by a **tutor** (partners in the project: **one from Romania, one from France and one from Poland**) and by the teachers specialized on the course topics.
- For each module , the document produced was composed by **10-15 pages** maximum /group. It had to be synthetic, clear and illustrated;
- It was presented to the other teams through web conferences;
- From the NA “Apele Romane” side, the teacher for the Module D (Economic analyze) was a specialist in economic analysis involved in the WFD implementation at the national level;
- All the learners which have followed at least the obligatory modules will get a **certificate**.

Collaborative process-OUTPUTS

- All the Romanian learners confirmed that the process of outputs elaboration is a collaborative one;
- For Romanian learners, it was easier to collaborate because they all work for the same company (even they work in different regions/basins) and their main duty is the implementation of the EU Directives in their river basins;
- The main objective of the introductory web conference was to build relationships, exchanges and establish communication among learners, learning to work with new tools and establish internal rules.

Collaborative process

- At the question related to the feedbacks on their own actions, the learners answered that they had reactions on behalf of the tutor, teacher, other Romanian colleagues (from other WT's) and of the experts from National Administration “Apele Romane”;
- Concerning the collective exchanges, the opinions are quite different, some of the learners considered that the web conference play an important role in this respect.

Tools, methodology and follow-up of learning course

- The trainees used the project web site (Mayetic Village), web conference/meetings (Centra Meeting)
- All learners had access to Mayetic Village web site through a password.
- In the frame of the modules, they tried successfully to use the collaborative website, therefore, every version of the documents and presentations was uploaded on the site
- Also, they could find information or documents related to project and to the topic (bibliography)
- All the presentations were made in PowerPoint
- The learners get support from the teacher and from the tutor



“WFD Community Project
Virtual Learning Community for Water Professionals”

National Administration “Romanian Waters”

Harmonized water bodies status assessment in the Common

Implementation Strategy of the WFD

Working Team WT2

biologist Naphegyi-Boldis Daniel Andrei

biochemistry engineer Neciu Bogdan Rares

chemist Rancov Georgiana Oana

chemist Serac Corina Maria

Participation of Romania to the Intercalibration exercise



Intercalibration site-Dumitreni (Mures River Basin)



WFD-Community
Collaborative Learning Community
for Water Professionals

HMWB AND AWB IN THE WATER FRAMEWORK DIRECTIVE

-Concepts and importance-

WT3

June 2005

Biol. Alina Ivascu
Arges Water Directorate

Biol. Irina Mezdroi
Olt Water Directorate

Eng. Laura Chiritoiu
Jiu Water Directorate

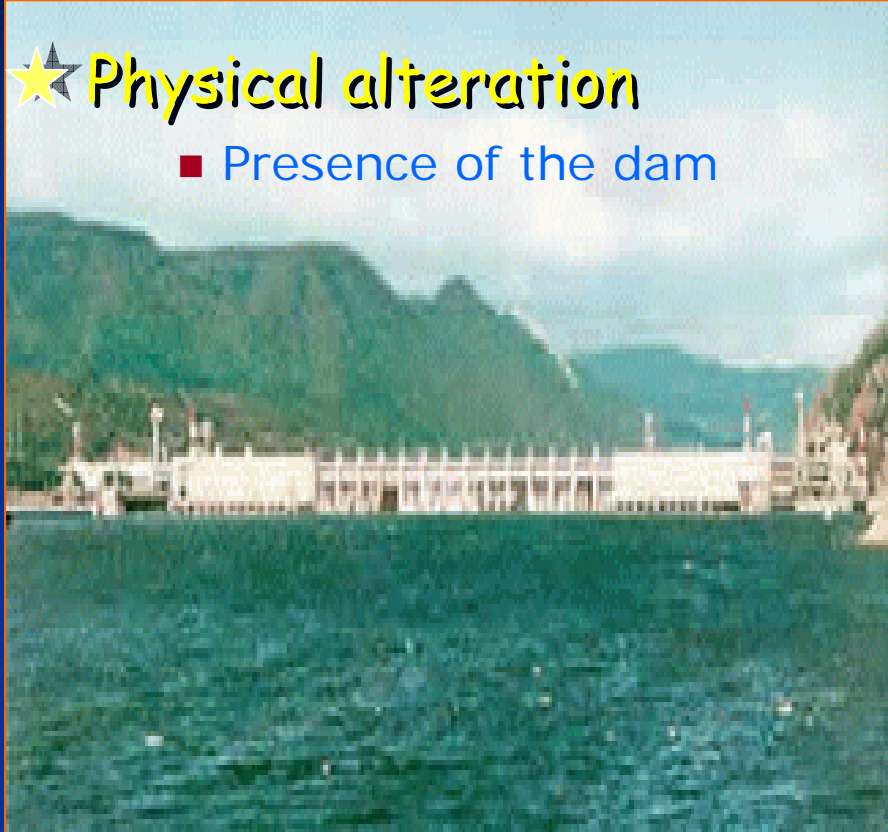
Biol. Oana Ristea
Buzau-Ialomita Water Directorate



IRON GATE I – HMWB

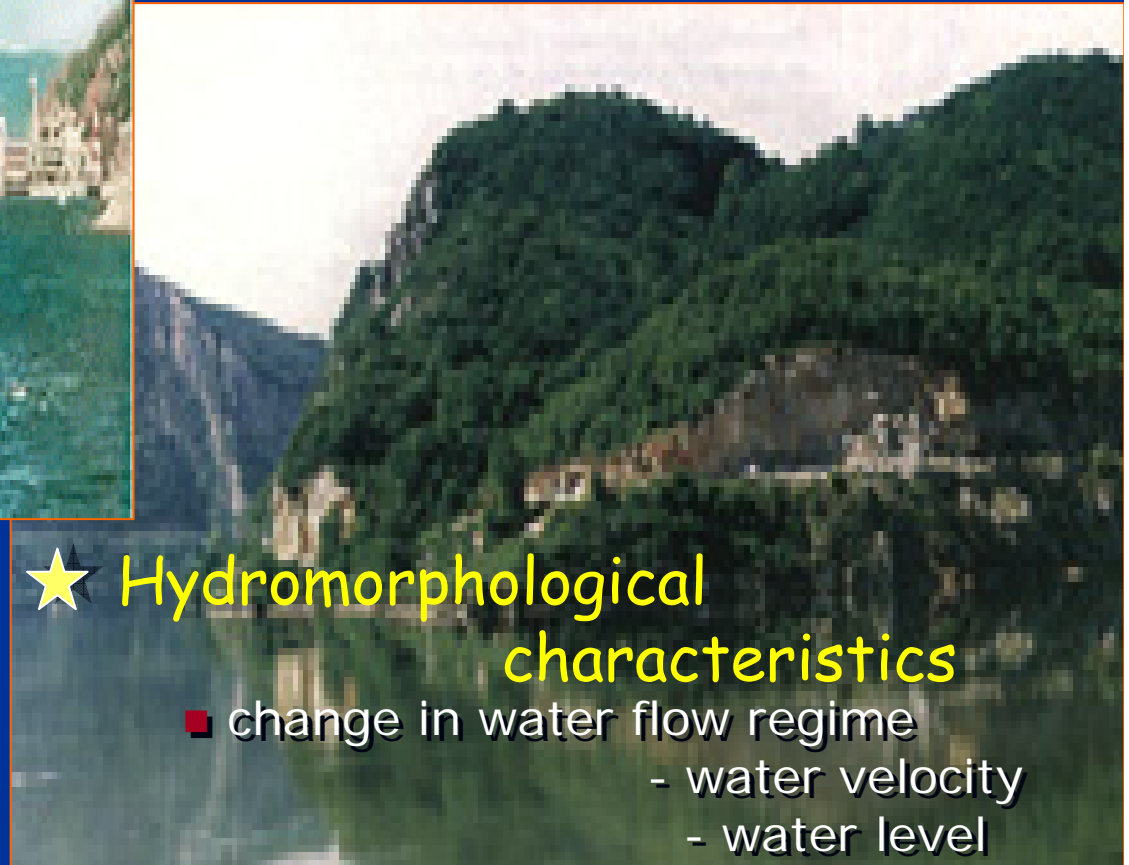
★ Physical alteration

- Presence of the dam



★ Hydromorphological characteristics

- change in water flow regime
 - water velocity
 - water level



**Water Framework Directive
Community
Module C: Monitoring
MC 4**

**How to evaluate if the water monitoring
is in accordance with the requirements of WFD ?**

**Give an example to improve the monitoring
in your district (or river basin) to be in accordance with the WFD**

Working Team 4:

Crina Catalina Andrei (Siret Directorate)

Luminita Gheorghe (Dobrogea - Litoral Directorate)

Ruxandra Maria Maxim (National Administration „Apele Romane”)

Iuliana Ticalo (Prut Directorate)

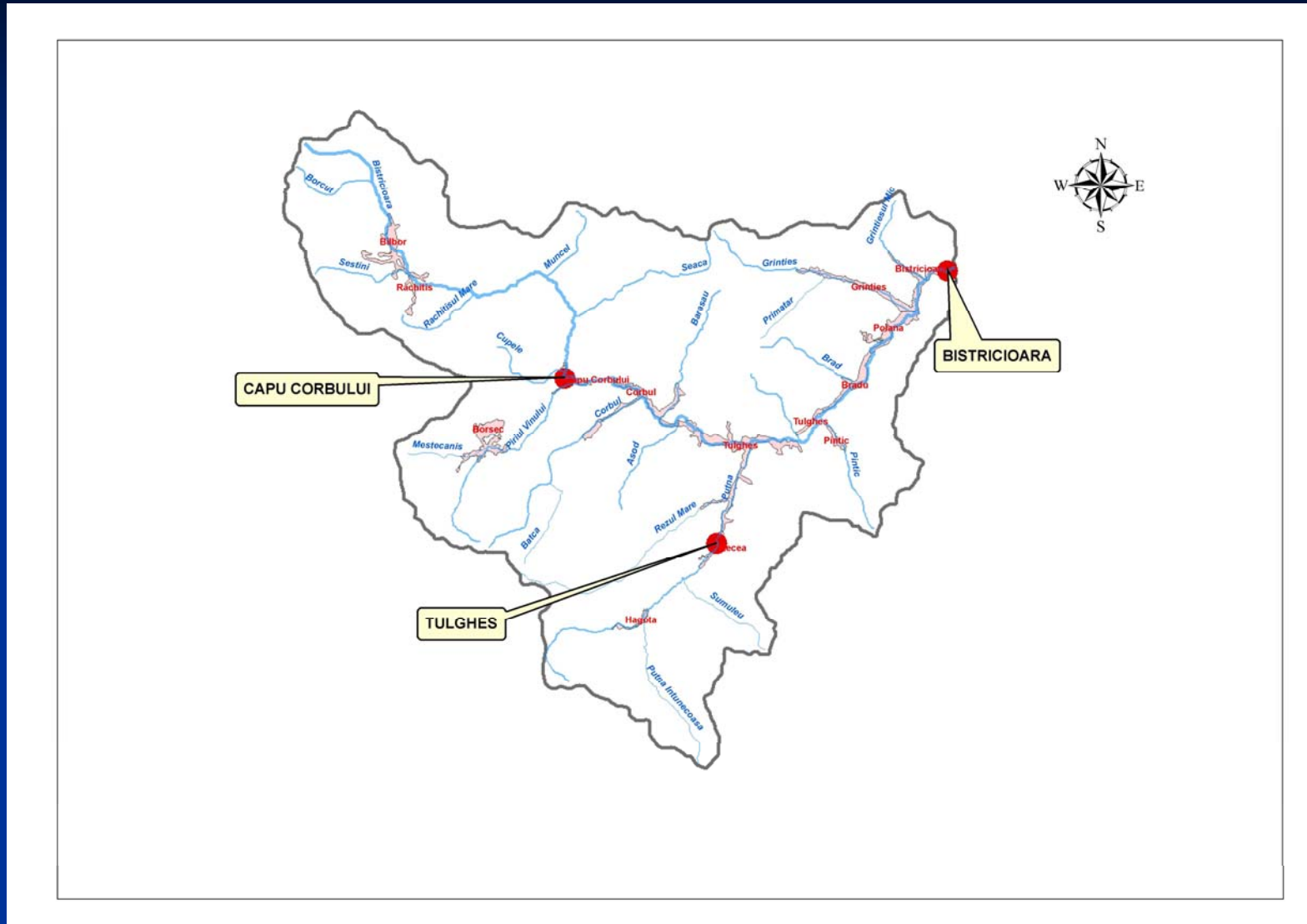


Figure 11 New proposed monitoring network

Course evaluation

- In the Polytechnic University of Bucharest is in function a Continuing Education for Energy and Environment Center (CFCEM);
- This center together with OIEau and ANAR, GWF and Hydrocontrol issued a certificate which will be recognized by national authorities from water system;
- Concerning the activities carried out by the Polytechnic University of Bucharest in the frame of the project, have been elaborated:
 - **Report of the Formation and on Validation Policies**
 - **Analyses Report on the Conditions of Recognition and Validation of the Virtual Training**
 - **Specification Conditions and Description of the Technical characteristics of the Device**

Project's results dissemination

- Articles will be published in “Hydrotechnica Review”, issued by the National Administration “Apele Romane”;
- A leaflet in English language, issued by GFW, will be also translated in Romanian language and will be published, showing the results of the project;
- Copies of the leaflet in Romanian language will be distributed to all the bodies which are involved in the implementation of the Water Framework Directive and which need specialized staff on these topics.

**THANK YOU FOR YOUR
ATTENTION!**

