



3rd NATIONAL CONSULTATION DIALOUGE in Lithuania

1. General Data

Country:	LITHUANIA
Organizer:	Public establishment "Vandens namai" and Vilnius university
Date & Place:	7 th December, 2015 Hotel "Ecotel Vilnius" Address: Slucko Str. 8, Vilnius LT-09312, Lithuania
Expected participants (institutions)	The Environmental Protection Agency (EPA), Ministry of Environment (ME), Lithuanian Geological Survey (LGS), Ministry of Agriculture (MA), Aleksandras Stulginskis University (ASU – agricultural), Lithuanian Hydrometeorological Service (LHMS), Center for Environmental Policy (CEP), UAB "Grota" and UAB "Vilniaus hidrogeologija" (hydrogeological firms), State Service for Protected Areas (SSPA), Lithuanian Energy Institute (LEI), Lithuanian Hydropower Association (LHA)

2. Objectives & Programme

Main objective of the 3rd NCD (which processes are you targeting)

Discussions "How to cope with the droughts"; Who, when and how should react to the problem? Whether it is the aggregate problem, or we can focus onto particular areas (e.g. agriculture)?

How will the 3rd NCD contribute to the development of the Drought Management Plan?

The dialogue is intended to persuade the decision makers that drought is a long-lived (even if it is not a frequent problem on national level) and complex phenomenon. Therefore, there is a necessity to shape a plan of appropriate measures in order to help mitigate the consequences of the problem: from an early warning to the correction of river basin management plans.

Programme of the 3rd NCD

13.30-14.00	Registration of participants
14.00-14.10	Foreword VšĮ "Vandens namai" (Global Water Partnership - GWP representative in Lithuania) Director G. Stankūnavičius
14.10-14.25	"Climate Change Issues " Speaker: Professor Arunas Bukantis, Vilnius University.
14.25-14.40	"Drought identification problems in Lithuania Speaker: Dr. Donatas Valiukas, Lithuanian Hydrometeorological Service under the Ministry of Environment
14.40-14.55	"Agricultural drought: Perceptions, Problems and Prospects " Speaker: Assoc. Prof. Laima Taparauskienė, Aleksandras Stulginskis University





14.55-15.10	"Hydrological drought: the formation of conditions for impact assessment" Speaker: Juozas Šimkus, Lithuanian Hydrometeorological Service under the Ministry of the Environment
15.10-15.30	Coffee break, Discussion
15.30-15.45	"Climate change impact on groundwater resources" Speaker: Jurga Arustienė, Lithuanian Geological Survey under the Ministry of Environment
15.45-16.00	"Remote sensing for detection vegetation conditions and for drought monitoring" Speaker: Victoria Mačiulytė, Vilnius University
16.00-16.15	"Surface water status and problems associated with the droughty environments" Speaker: Dr. Jurgita Vaitiekūnienė, Center for Environmental Policy
16.15-16.30	"Identifying future drought related issues on national and regional level" Speaker: VšĮ "Vandens namai" director G. Stankūnavičius
16.30	Discussion Estimated topic "Opportunities to cope with droughts"; also the translated GWP CEE publication "Guidelines for the preparation of Drought Management Plans" will be discussed
17.30	Concluding remarks

3. Report (max 2000 characters)

Report (max 2000 characters)

short description of the 3rd NCD

The main discussion circled around four topics:

- 1) Existing drought definition (as a natural disaster) as well as drought diagnostics are adequate and sufficient for drought monitoring and assessment at least from agricultural point of view; Insurance companies seek other indices (instead of officially recognised HTK) reflecting direct drought damage on crops: indices and/or methods allowing to discriminate between losses due to drought and losses due to improper farming.
- 2) **Hydrological drought.** Is this type of drought is defined properly? Who is responsible for the definition of this phenomenon? What is the difference between e-flow and hydrological drought? According to the hydrological indices this year was (and still is) categorised as severe in many water bodies. What measures were suggested and/or implemented to mitigate hydrological drought consequences?
 - Small hydropower stations and their reservoirs. There is no uniform state policy in the management of small hydropower stations. This is a great potential in storing and redistributing surface water resources. What about cargo and passenger shipping during low flow periods?
- 3) **Resources of drinking water.** In reality the quantity and quality of underground waters do not depend on dry periods (droughts). What to do with the problem of empty wells even if this source of drinking water is still in use in some countryside/remote areas (villages). If there is expected any substantial decline of underground water volume due to climate change?
- 4) The quality of surface water due to drought. Point pollution vs diffuse pollution. Increase in runoff (discharge) dilutes pollution and vice versa. Maximal values of spring run-off contrarily





force to increase nitrogen concentration. Basic flow during dry spells and droughts determines lower values of pollutants concentration in rivers except point pollution inside towns and near big plants. What about the option to strengthen the requirements for waste waters (during dry conditions)?

Outcomes

Briefly explain what were the main outcomes of your NCD and if you have achieved any of the below listed outcomes.

Some of the expected outcomes from the 3rd NCD should be:

- Identified policies, strategies and plans related to drought management and authorities responsible for them (as pre-activity for preparation of the possible follow-up project proposals dealing with current status and improvement of water management during drought within water legislation and regulations);
- Analysis of the current status of the drought management (example in the scheme sent via email) who is responsible for each part of the management, which actions are already being implemented, which ones are partly or not at all, etc.;
- (Draft) action plan or identified future activities (what to do to support "non-functional" parts of the management identified in the analysis) that need to be taken in order to establish/maintain drought management process on national level.

At the moment there is <u>no one universal drought index or method</u> for continuing drought monitoring and applying it in different branches of the economy: agriculture, water management etc. Also, there is <u>no early warning system based on extended medium range weather prediction</u> (lead time 10-15 days, Lithuania is a cooperating state of ECMWF), except early warnings based on weather trend analysis (e.g. for instance, if there will be no rain within next 5 days – severe drought conditions will be announced in the northern part of...)

Insurance companies (focusing on agricultural crop insurance) need well developed methodology for assessing crop losses due to weather impact (drought effect) and they were very interesting in officially recognised DMP. On the other hand no insurance experience exists for insuring water and/or energy losses due to drought.

Transboundary issues. The two largest rivers have their upper reaches in Belarus territory, however no substantial barriers in collaboration for river basin management between the two countries were observed. Since 2012 (when they filled the reservoir of Grodno HPS) the Belarusian part followed a consensus to keep at least e-flow volume (from HPS outlets) during the low flow periods. This wasn't an exception.

Underground water resources seem to be sufficient for today and future climate conditions (underground water bores is the main source of water supply in Lithuania) except shallow ground water levels which are very sensible to drought.

RBMPs were implemented in 2010-2015 period. In 2015 and 2021 they will be updated however there is no drought management plans provided to be incorporated into updated version of RBMP in 2015

Next steps

What were the next steps agreed on the NCD?

We agreed to create a drought commission (DC) consisting of members from hydrology and meteorology, agriculture, energy, environment protection, NGO, insurance, and other sectors. DC will, at the beginning, work on an honorary basis and the main DC task should be to promote activity associated with the drought planning, mitigation; lobbying in adoption of appropriate legislative framework.

First call to pick all potential DC members is provided to issue at the end of January, 2016.