



Sustainable Management of Lithuanian Water Resources

12.30-12.45. Introduction. Surface and Groundwater Resources. Bernardas Paukšty GWP-Lithuania, Juozas Mockevičius, Geological Survey under the Ministry of Environment;



12.45-13.00 Protected Areas of Lithuania. Rūta Gruzdytė, State Protected Areas Service, Ministry of Environment;

13.00-13.15 Water Supply and Sanitation. Monika Biraitė, Ministry of Environment;

13.15-13.30 Coffee break.

13.30 -13.45 Assessment of Human Impact. Jurgita Vaitiekūnienė, Water expert.

13.45 -14.00 Integrated Water Resources Management in River Basin Districts. Implementation of the EU Water Directives. Mindaugas Gudas and Aldona Marge-rienė, Environmental Protection Agency, Ingrida Girkontaitė, Ministry of Environmen

14.00-14.20 Film “Water for the Future” .

LITHUANIA – COUNTRY OF RAIN

Area - 65300 km² , 2.9% of area covered by water

Population - 3,37 mil.

Density of population – 52 people/km²

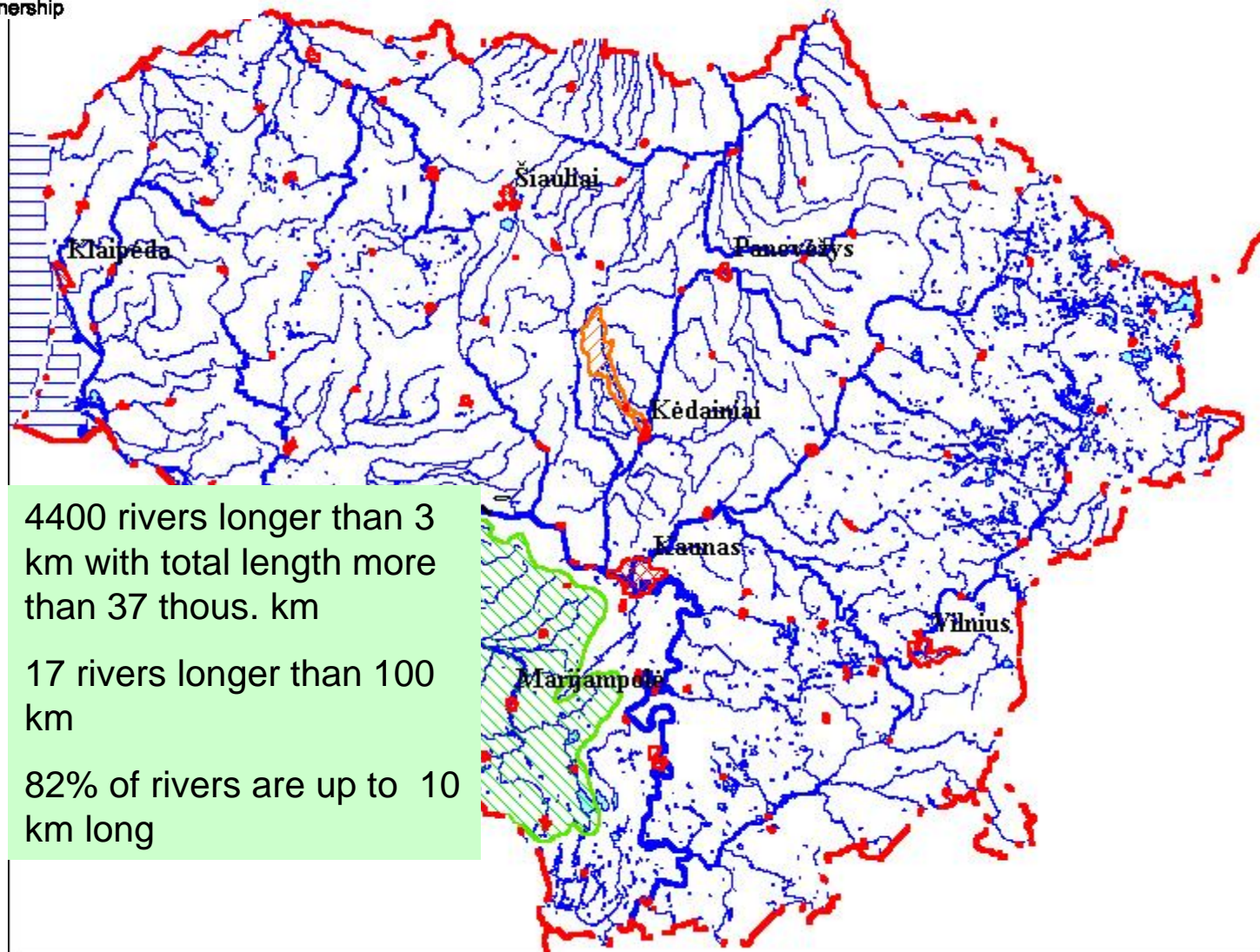
GDP per capita – 8300 Euro in 2007

From March 29, 2004 - NATO member

From May 1, 2004 - EU member



RIVERS



There are 1,18 km of rivers on 1 km² area



LARGEST RIVERS

Name	Total length	Lengh in LT
Nemunas	937 (Ebro-910 km)	475
Neris	510	234
Venta	346	161
Šešupė	298	209
Mūša (Lielupė)	284	146
Šventoji	246	246
Nevėžis	209	209
Merkys	203	190
Minija	202	202



We have more than 6000 lakes



**Lakes cover
1,4% of
Lithuanian
territory**



**2850 lakes are larger than 0.5 ha,
covering total area of 908 km²**



LARGEST LAKES

Name	area, ha	depth, m
Drūkšiai	4479,0	33,3
Dysnai	2439,4	6,0
Dusia	2334,2	31,7
Sartai	1331,6	22,0
Luodis	1320,0	16,5
Metelys	1292,0	15,0
Plateliai	1209,6	46,6
Avilys	1209	13,5
Rėkyva	1150,9	7,0
Alaušas	1054,0	42,0

We have 100 km of Baltic Sea Coast and some sunny days





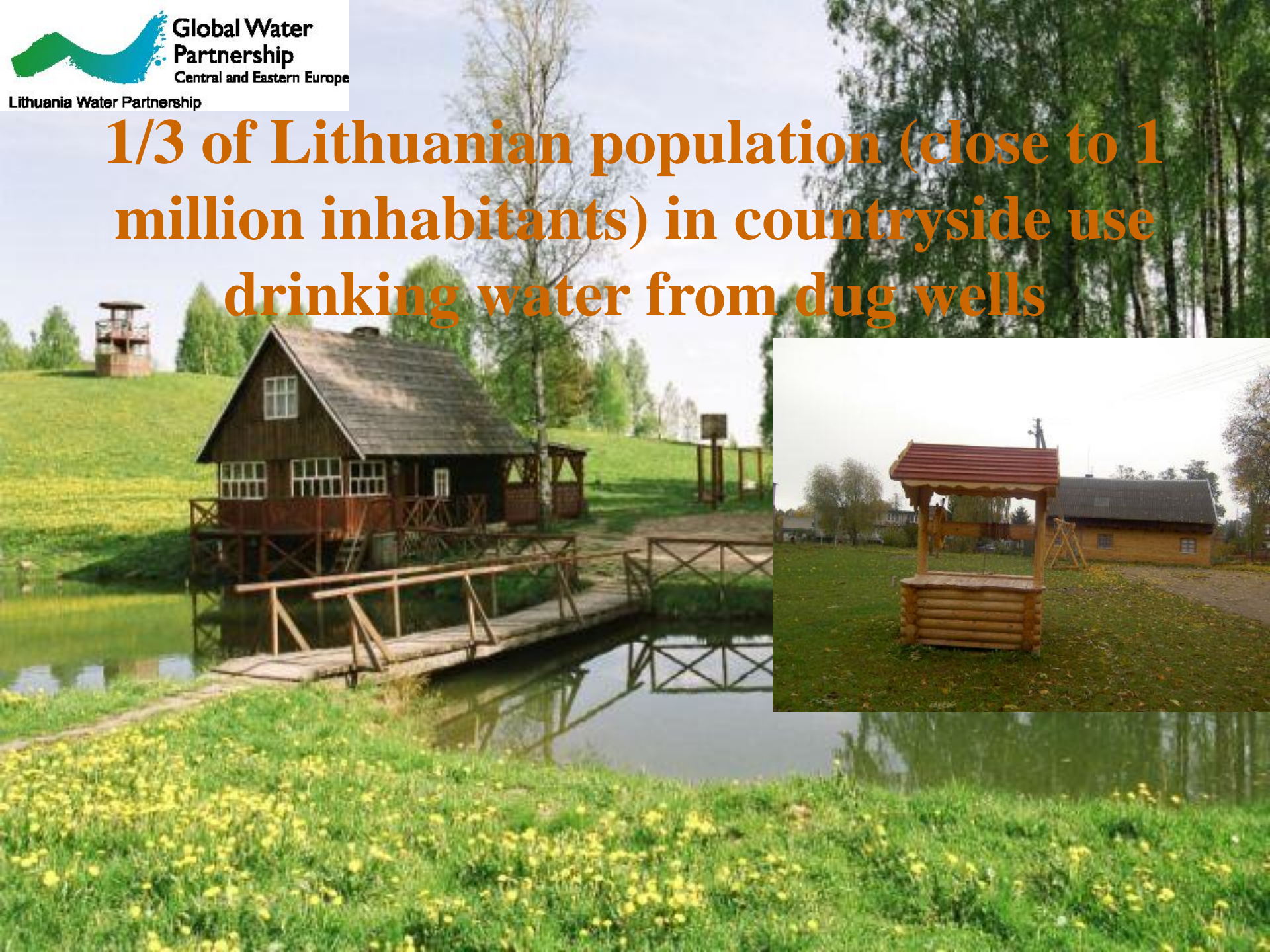
Only groundwater is supplied for drinking purposes in Lithuania

We have more than 14 thous. artesian water supply wells installed into 20 aquifers.

104 prospected well fields supply groundwater to cities and larger settlements



1/3 of Lithuanian population (close to 1 million inhabitants) in countryside use drinking water from dug wells

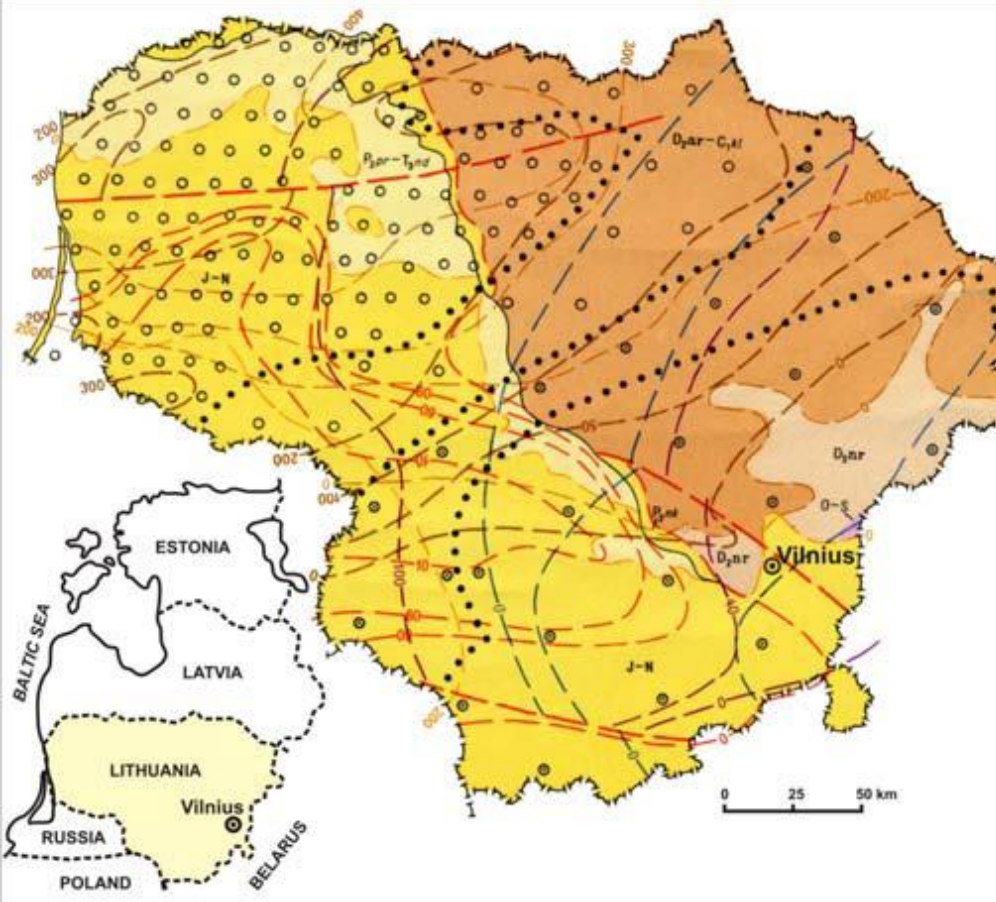




At the moment
18 types of
mineral water are
known and used



Geothermal water



Lithuanian territory was divided into 3 major regions: 1) the West Lithuanian geothermal anomaly with groundwater temperatures varying from 60-90 to 110-145°C (at the depth of 2-4 km);

2) central part of Lithuania where groundwater temperatures at the depth of 200-1800 m reach 20-60°C, and

3) Eastern part of the country with the background groundwater temperatures not exceed 20°C.



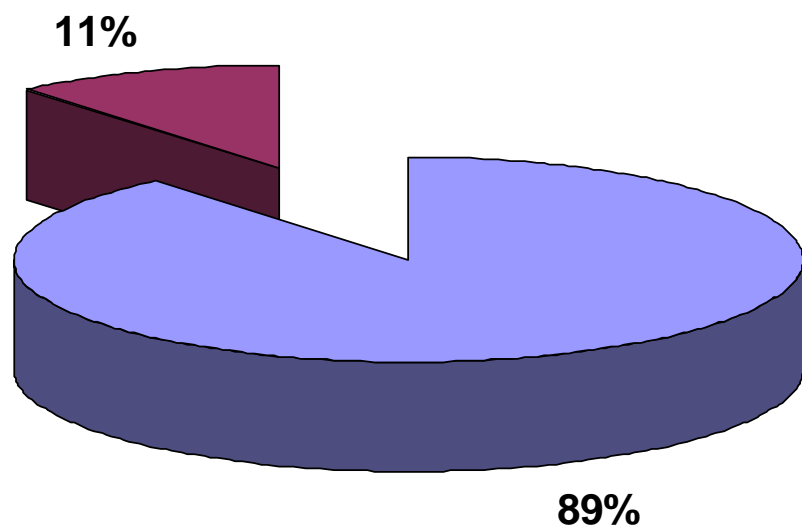
Resources

Available fresh groundwater
resources – 3,2 mil.m³/d
or 1,168 km³/m

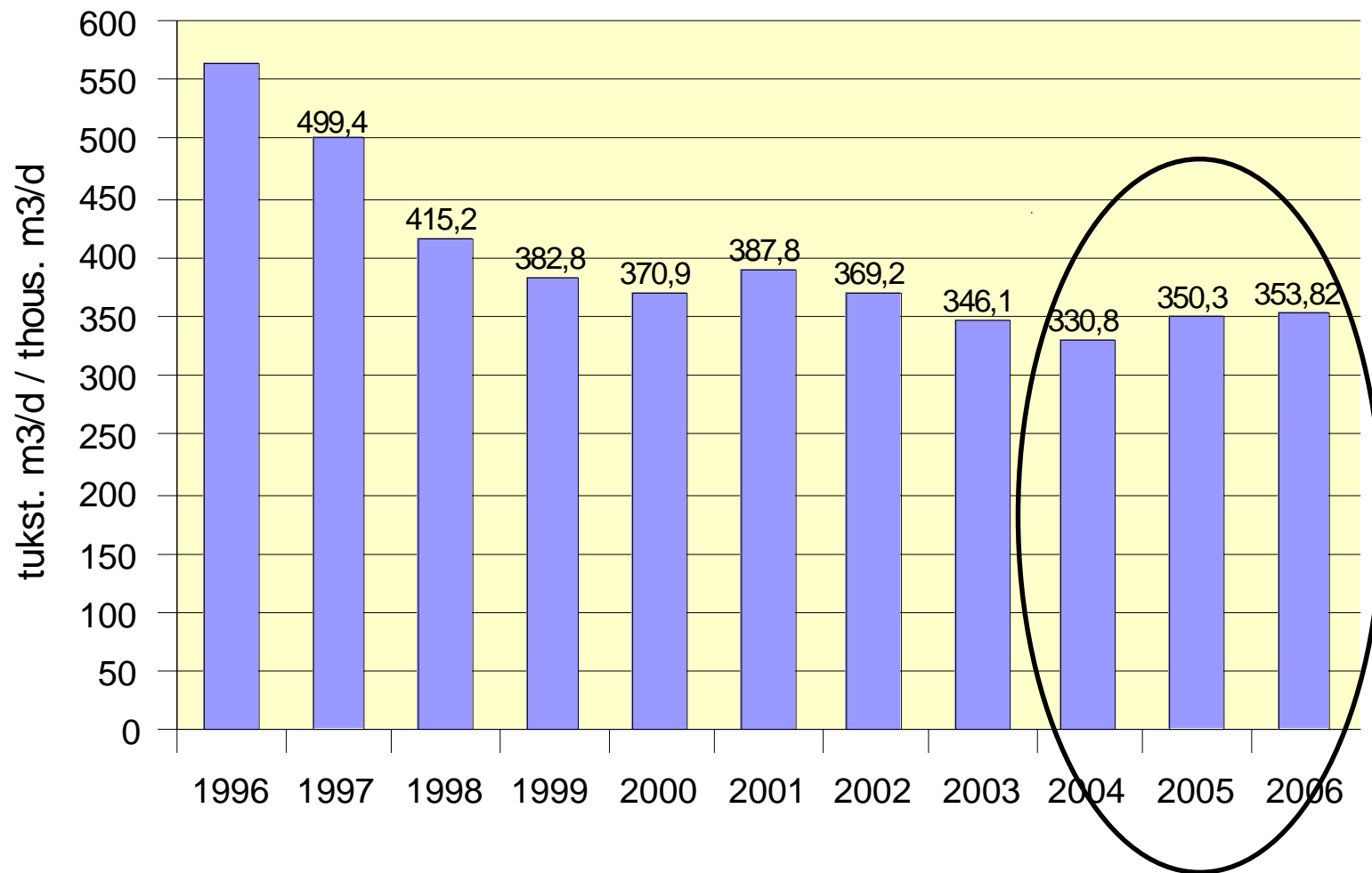
Today we use:

0,17 – 0,12 mil.m³/d

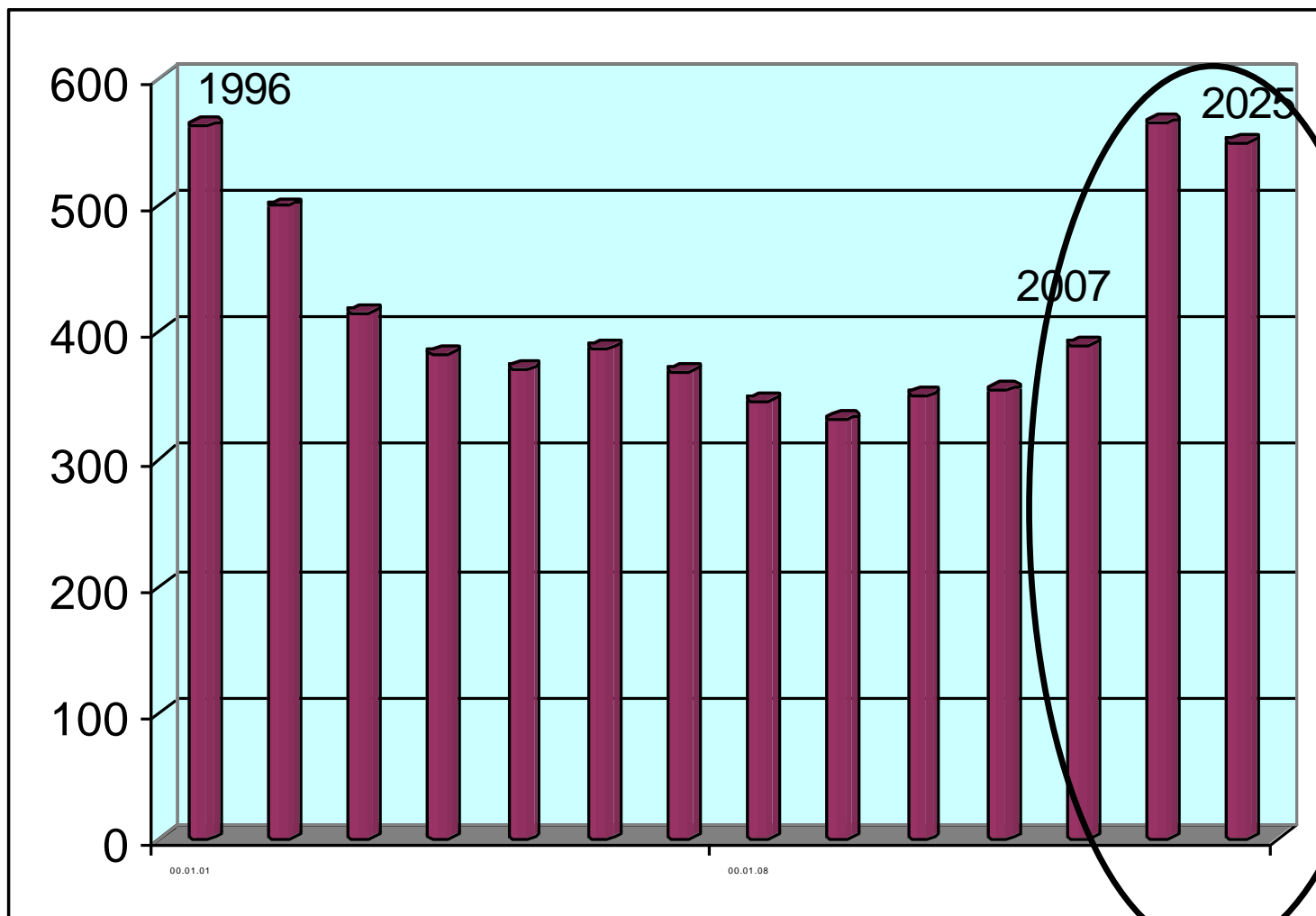
or 132'235'000 m³/m



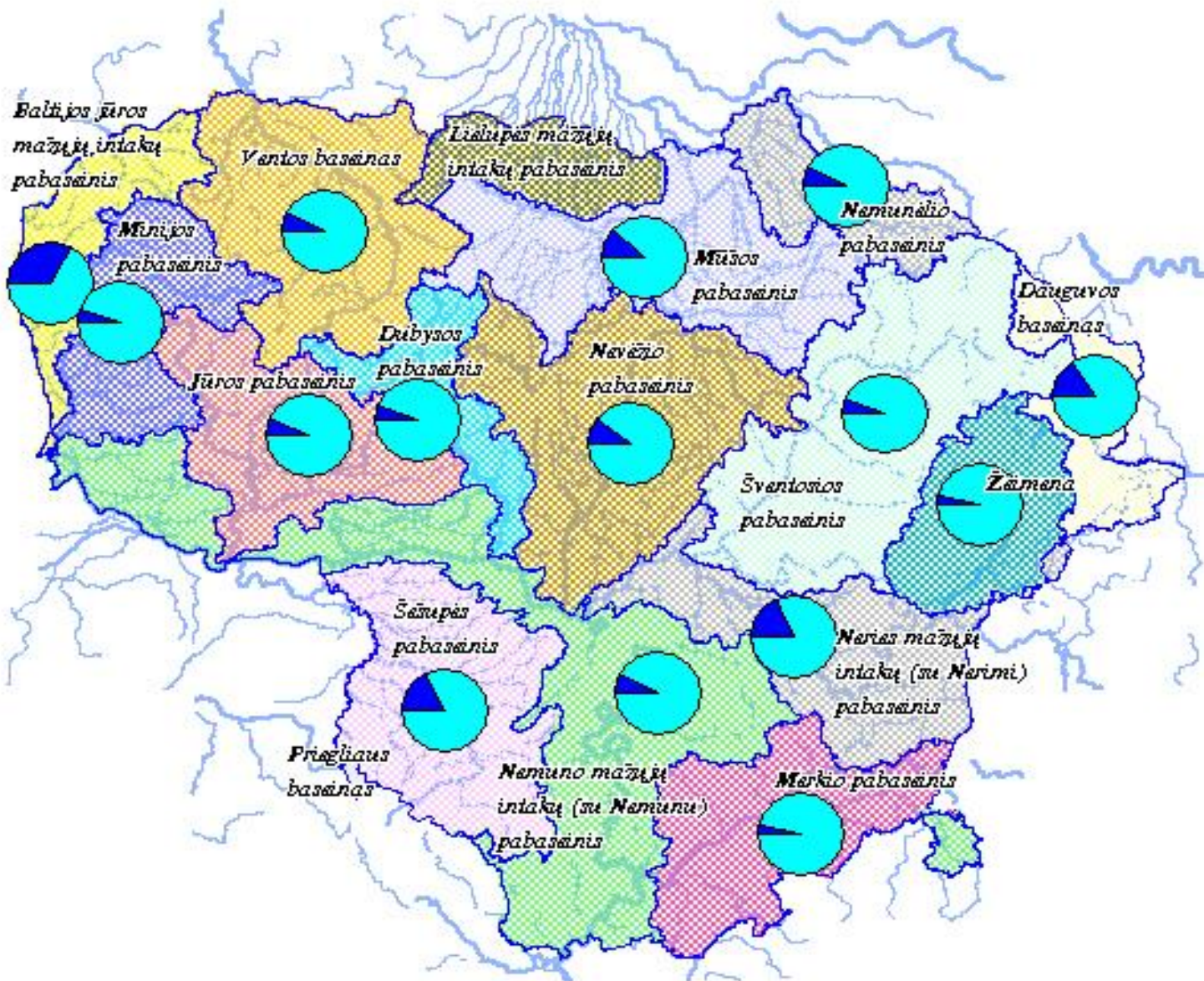
Groundwater consumption

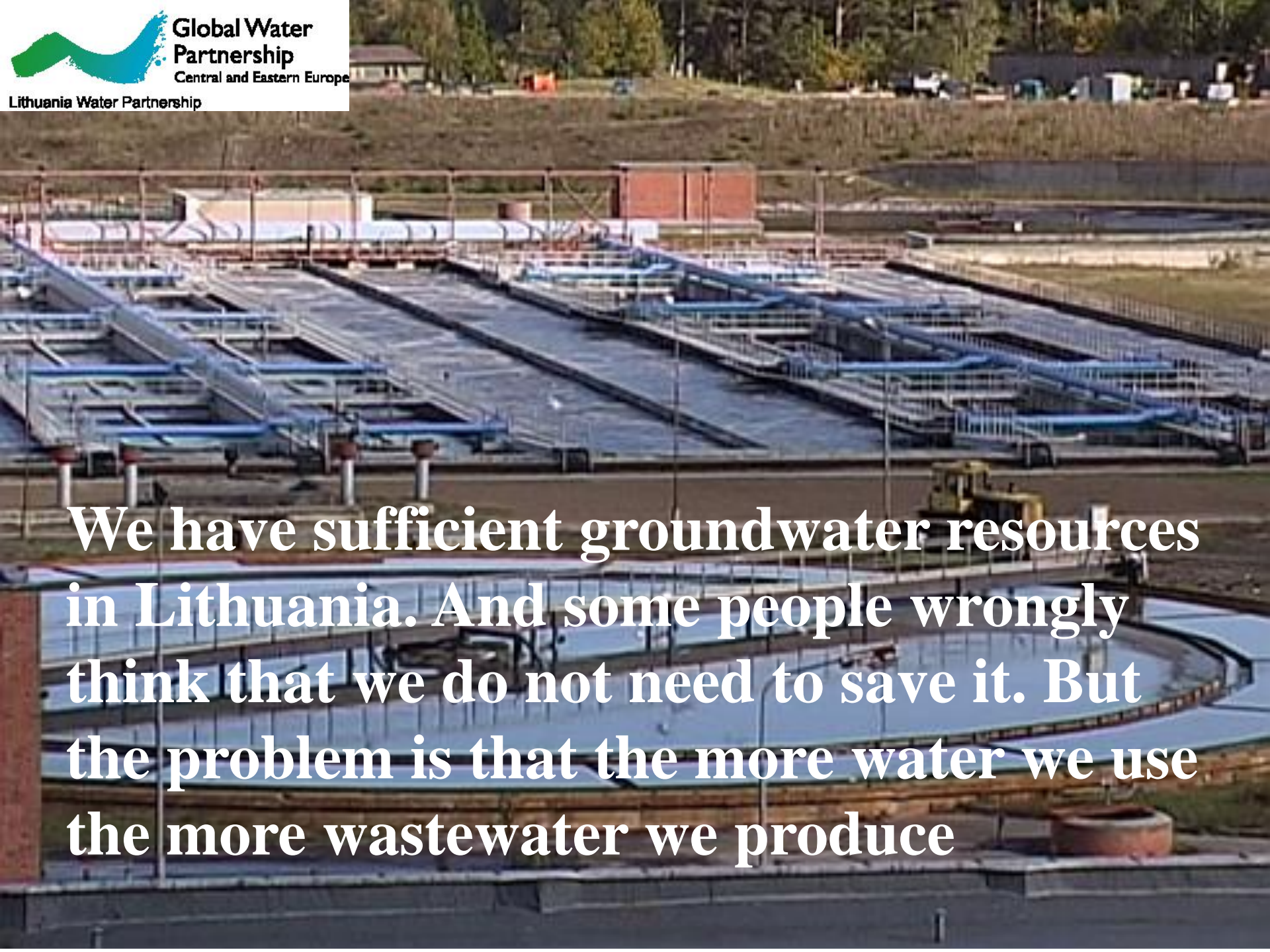


Forecast of groundwater consumption



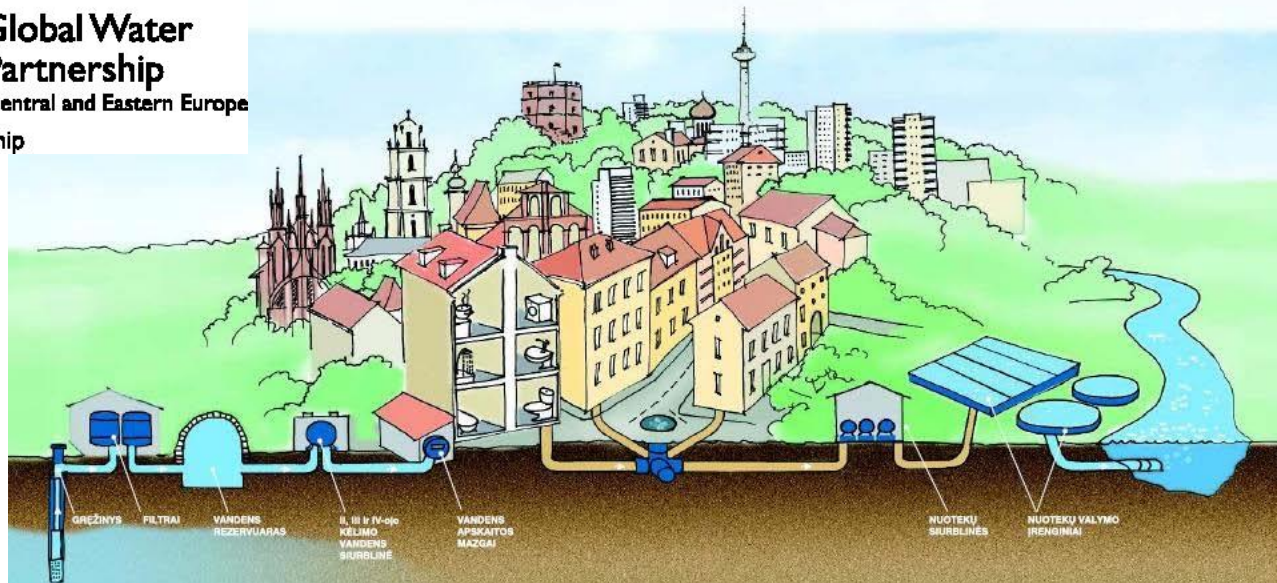
Groundwater use in river basins



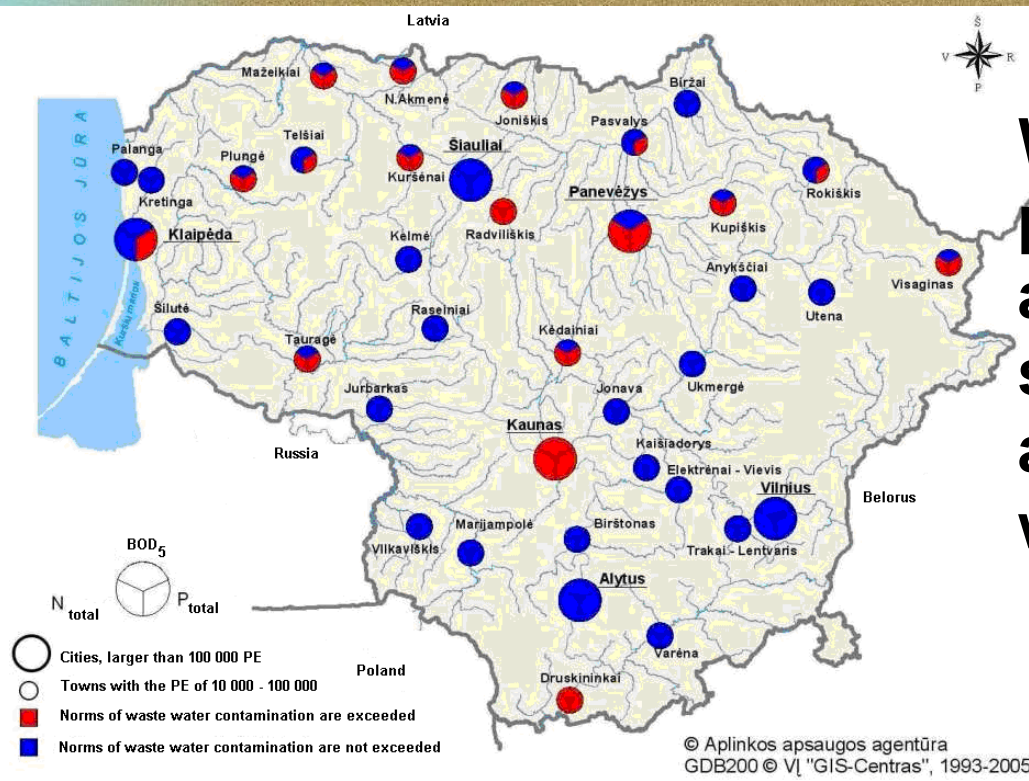


We have sufficient groundwater resources in Lithuania. And some people wrongly think that we do not need to save it. But the problem is that the more water we use the more wastewater we produce





In towns with population over 10 000 residents, 29% of emitted waste water does not meet quality requirements



We know problems and try to solve them in a sustainable way



MUCHAS GRACIAS